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ABSTRACT

This report presents the results of research that gathered baseline data for a proposed evaluation of the Family Matters Project, an early intervention program that studied the utility of family and local resources as support systems in the care of preschoolers. Conducted in Syracuse, New York, the research collected demographic data, descriptions of sample families' surrounding contexts (neighborhood, work world, and personal social networks), and parents' perceptions of children and children's activities. The information was expected to provide insights into aspects of the ecology of family life that are likely to affect and be affected by the intervention program. Chapters one and two explain the purpose, theory, and methodology of the study. Chapter three presents findings on the effects of mothers' work status and education upon their perceptions of their children. Chapter four examines whether families in poor affluent neighborhoods perceive their neighborhoods as supportive systems for child rearing. Chapter five relates parents' social relationship network structures and their perceptions of their children. Chapter six examines how parents' social networks and racial messages influence children's racial preference patterns. Finally, chapter seven discusses implications of the findings for evaluating the the Family Matters Project. (Author/MJL)

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THE ECOLOGY OF URBAN FAMILY LIFE:

A SUMMARY REPORT TO THE NATIONAL INSTITUTE OF EDUCATION

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The Comparative Ecology of Human Development is assiciated with a larger research effort called the International Group for Comparative Human Ecology. The five countries participating in this working group are Germany, Israel, Sweden, the United States, and Wales. The scientific leaders in each country are Rudolf Fisch and Kurt Luscher (Germany), Sophie Kav-Venaki and Ron Shouval (Israel), Bengt-Erik Andersson (Sweden), Ronald Davie (Wales), and Urie Bronfenbrenner, Moncrieff Cochran and William Cross (U.S.A.). The members of this group have worked cooperatively on concepts, instruments, and research methods. The group has as one of its goals the cross-cultural comparison of data related to the ecology of families with young children.

This report is the product of the efforts of many people. The authors would like to thank the 322 Syracuse families who have opened their homes to the project and provided us with the information presented herein. Particular appreciation is owed to John Lemley, the project administrative manager, and Kay Riddell Stickane for their assistance in the preparation of this report. The report also reflects many hours of dedicated work by Liz Kiely, Sam Morrie, Mary Larner, David Riley, Nancy Burston, Ann Bell, Cheryl Kelsey, Cathy Cross, Meg Murry, Gerri Jones, and other analysis staff members at Cornell. The innumerable revisions of the manuscripts were typed by Vicki Griffin.

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CHAPTER 1

STATEMENT OF PURPOSE AND THEORETICAL OVERVIEW

Moncrieff Cochran, Urie Bronfenbrenner, and William E. Cross

> Today we acknowledge that the massive alteration of the natural environment made possible by modern technology and industrialization can destroy the physical ecology essential to life itself. We have yet to recognize that this same awesome process now has its analogue in the social realm as well, that the unthinking exercise of massive techological power, and an unquestioning acquiescence to the demands of industrialization can unleash social forces which, if left unbridled, can destroy the human ecology -- the social fabric that nurtures and sustains our capacity to live and work together effectively and to raise children to become competent and compassionate members of society (Bronfenbrenner, 1981, p. 38).

In an article entitled "Children and Families: 1984," Urie Bronfenbrenner refers to George Orwell's prophetic prediction of the destruction of free Western society and its basic institutions, including the family, by the year 1984. He goes on to argue that while Orwell may have picked the right year and outcome, he was wrong in attributing that outcome to human efficiency rather than human ineptitude. Bronfenbrenner sees the erosion of the power of the family and the childrearing system as a product of public indifference, and he feels that we are failing to come to terms with some hard realities. The research described in this summary report of baseline analyses has been conducted in an attempt to confront some of those realities.

The Family Matters Project was established in 1976 with support from a variety of funding sources to study the "capacity of urban American environments to serve as support systems to parents and other adults directly involved in the care, upbringing and education of children" (Bronfenbrenner and Cochran, 1976). To conduct such a study we set out in two complementary directions: first, to understand existing formal and informal support systems as they currently affect families with preschool children; second, to assess the potential impact of an experimental program building on existing family strengths and local resources. The latter was designed as an alternative to the "deficit model" characterizing most social programs in American society. In this second endeavor, trained neighborhood workers were made available to families to provide child, family, and community-related information through home visits and cluster groupings.

The first effort seeks to capitalize on an "experiment of nature" by comparing contexts of childrearing both within the U.S. and cross-culturally. Colleagues in Sweden, Israel, Wales, and West Germany have been gathering data from families with preschool children that bear upon the relationship between stresses experienced in the parenting and work roles, and the support systems, informal as well as formal, that are utilized in response to those stresses. We have been gathering similar data in Syracuse, New York, and expect to be comparing our findings with those of our colleagues overseas in order to better understand the part played by public investment at the community level in recognizing and supporting the parenting role.

The focus of this report, however, is on the evaluation of that purely American aspect of our enterprise, the baseline assessment and the intervention that has followed. Prior to the launching of our parental empowerment program, called Family Matters, we gathered demographic data, perceptions and descriptions of contexts beyond the immediate family (including the neighborhood, the world of work, and personal social networks), perceptions of family members, and descriptions of the child's daily activities from the parents of 276 families living in Syracuse, New York. These data constitute the baseline phase of an evaluation strategy designed to provide information about the impact of the Family Matters program upon the performance of children in kindergarten and first grade.

The primary purpose of the analyses undertaken for this report has been to illuminate aspects of the ecology of family life likely to have an effect upon and be affected by the intervention program. In the world surrounding the immediate family we have emphasized the neighborhood, the work world, and the informal social network because of prior evidence indicating that these are aspects of human ecology crucial to young families, and because our intervention program was designed with neighborhood and network especially in mind. Parental perceptions of self and child are included because the process of parental empowerment is predicated upon the generation of changes in these psychological fields. Parent-child activities are of concern because we view them as central to the development of social and cognitive skills in the child, and we have emphasized such activities in the program. Finally, special attention is given to the ecology of identity formation for Black children because of the stress potential inherent in minority status and the special demands that stress implies for program operations. Based upon analyses of these data, we are in a position to generate a more differentiated set of hypotheses about the impacts of program activities on families in the various ecological niches included in our sample. The follow-up data collection required to permit pre-post comparison will be completed by spring 1982.

The Ecological Perspective

Detailed discussions of the project's conceptual framework, supported by literature reviews, have been presented elsewhere (Bronfenbrenner and Cochran, 1976; Cross et al., 1977). In this introduction to the baseline analysis, we review only those concepts underlying the project that provide the basis for the analyses to follow.

The ecological perspective takes as its starting point the view that human behavior is explained not only by the influences associated with the immediate setting containing the developing child (i.e., home, school classroom, etc.), but also those external settings that have an indirect impact on the child through their effects upon the mental health and general well-being of the father and/or mother (for example, the legal system, welfare system, world of work). Thus, growth is conceived as a series of encounters across as well as within ecological systems that both include and are external to the home environment. One such encounter, the transition from home to school, is a major event in the life of a child and one of the major foci of our experimental program. For the young adult, there is the transition from school to full-time employment or homemaking. Later on, transitions such as that from full-time employment to retirement are experienced.

In viewing the developing person across time and space, the focus of the ecological perspective is not only on the behavior of that person but also on the perceptions, behavior, and attitudes of key people in the environment, as they affect and are affected by the individual in question. Thus, the ecological approach places a premium on reciprocity,

systems analysis, life course development, and, by implication, the value of longitudinal studies.

Because recent research has pointed to the possibility that laboratory-based studies of human behavior produce results that may not be replicable in natural settings, those researchers utilizing the ecological perspective also stress the importance of collecting data in surroundings familiar to the subject, using methods that provide subjects with considerable control over the research situation. In the case of the Family Matters project, these methods have consisted primarily of open-ended interviews.

While the forces affecting the lives of most children appear on the surface to be similar, the characteristics, quality of life, and dynamics of those forces can differ markedly as a consequence of such factors as race, income, family structure, ethnicity, and culture.

Because families in the same neighborhood tend to be similar in race, socioeconomic status, family structure, and even maternal employment patterns, the neighborhood as a concept takes on special importance from the ecological perspective (Bronfenbrenner, 1980). From this vantage point, the neighborhood becomes a major locus for what we call an ecological niche. A child's ecological niche is defined by the immediate setting containing the child (home, local park, nursery school classroom), the interconnections among those settings, and the major institutions as they indirectly affect the child (parent's workplace, welfare system, school board). Certain niches occur more frequently than others in American society, and so characterize our society. We have systematically sampled a number of these modal niches in this research project, and the analyses reported in this document reflect that sampling strategy.

Since contrasting ecological niches place different demands on families, those of us utilizing the ecological perspective eschew monadic concepts of family functioning, and seek instead to discover links between patterns of family functioning and the demand characteristics of the most common human ecologies. Many of the links between different ecologies and variations in human development have remained relatively unexplored by social scientists, and so contemporary ecological studies most often devote more attention to the generation of hypotheses than to the testing of previously established empirical findings.

Although the ecological framework incorporates a number of systems through which human behavior may be influenced (mass media, education, employment, etc.), one such system has characteristics that combine to provide it with special potential for mediating between forces more distant from the family and the relationship between parent and child. The personal social network provides every parent with social links to others outside the home who can provide a variety of supportive services to both parent and child (Cochran and Brassard, 1979). These relationships may serve as bridges to other major ecological contexts, like the neighborhood, the school, and the world of work. Because it can serve so many functions for parent and child, the social network has a prominent place in our conceptual model and in this analysis of baseline data.

One other concept that has greatly influenced the kinds of data gathered in this research project is ecological validity. Central to the concept of ecological validity is knowledge of the subject's definition of the situation, for without such knowledge the researcher has no way of knowing whether the subject is experiencing the environment in the way it is perceived by the researchers (Bronfenbrenner, 1979). Accordingly, in this research we rely heavily upon parents' perceptions of the worlds inside and beyond their

families, believing that by combining these perceptions with "objective" information also related to these worlds, we can understand what motivates parents living in differing ecological niches to organize their lives and the lives of their children in the ways they do.

The focus of the research, and the overall thrust of this report, is on the capacity of various ecological settings to serve as supports to parents and other caregivers as they function in their childrearing roles. The Family Matters experimental program was designed with two general hypotheses in mind: 1) that the development of the child's ability to function effectively outside the home depends on the extent and manner in which parents and others engage with him or her in joint activities; and 2) that the capacity of parents to engage in such joint behavior depends on the extent to which there exist external support systems that provide them with opportunity, assistance, status, resources, and channels of communication. The goals of the visits and grouping activities which constituted the program were to reduce isolation, to give recognition to parents as experts, to reinforce and encourage parent-child activities, to encourage the exchange of resources among neighboring families, and to facilitate concerted action by participants on behalf of their children. Evaluation of the intervention program is designed to examine the links between external supports and the child's performance in primary school. It is reasonable to suppose that this relationship is mediated by the parent-child relationship. Evidence in support of this supposition is found in the chapters that follow. After a review of the research methods utilized in the research (Chapter 2), attention is given to the effects of mothers' work status upon their perceptions of their children (Chapter 3). In Chapter 4 the focus shifts to the neighborhood as a context for child development, and social networks as informal support systems are considered in Chapter 5. Chapter 6 contains a more holistic analysis of the social ecology within which identity formation is fostered in Black and white children, and the report concludes with a discussion of the implications of all our analyses for hypothesized impacts of the Family Matters intervention program.

CHAPTER 2

METHODS

Charles R. Henderson, Jr.

Introduction

This chapter provides an overview of our sample design, instruments, and variables, and describes models and methods for analysis. It is important to note that this report discusses results only for mothers; results comparing mothers and fathers will be given in subsequent reports. Also to be given particular attention in future analyses are effects of neighborhoods and neighborhood types. Thus the results in this report, while presented in their own right as final, can be thought of as the foundation for future analyses that will take into account potentially important additional variables and alternative models.

The Sample

In the design and selection of a sample for this study, we set out to accomplish several objectives. First, there needed to be enough families to permit inclusion of a broad range of family types, thus permitting some generalization of findings and reasonably fine-grained distinctions among families and individuals, where indicated by the data. Second, and acting strongly to limit the first, we wished to utilize a relatively time-consuming in-depth interviewing procedure, in order to obtain the kind of rich case material that makes possible the qualitative search for statements of causality as well as broad-scale quantitative examination of relationships. Therefore, the sample had to be small enough to accommodate such an approach within the limits of time and money. Given these considerations, our sample is unusual in its planned diversity of family types (together with the intensive interview data from each family).

A primary focus of the study from its inception has been to examine the family as a childrearing system and to examine the effects of different ecological contexts on the effectiveness of this system. To the extent that the research was able to include families from contrasting contexts, such as different work situations and different neighborhoods, we are now able to examine some of the effects of those contexts. In addition, studying families from a number of ecologies gives us greater potential to understand relations that hold across groups, and to make more general inferences regarding these relationships.

From an ecological perspective, the neighborhood is of special importance because it constitutes, particularly in modern industrialized societies, a principal environmental sphere in which a number of contexts intersect. Families living in the same neighborhood tend to be similar in race, socioeconomic status, and also, as our own data show, in patterns of family structure, maternal employment, and use of day care services. Moreover, the research evidence indicates that, within such areas of intersection and overlap between structural variables, the so-called developmental "effects" are multiplied rather than added (Bronfenbrenner, 1979). In terms of our ecological theory, these special characteristics identify the neighborhood as a major locus for the formation of what we have called an ecological niche.

This perspective led us to sample families explicitly on the basis of neighborhoods. Accordingly, we employed a stratified random sampling procedure at both the level of

neighborhoods and of families. First, 29 city and 28 suburban neighborhoods in the Syracuse, New York area were identified.* Syracuse was chosen since it is a representative moderate-sized urban area and has the additional advantage of being within feasible traveling distance of Cornell University. (Syracuse is recognized in marketing research as a prototype for cities of moderate size across the U.S.) The neighborhoods were then further classified by income level and by ethnic/racial composition. Using three income levels and four ethnic/race levels,** we randomly selected neighborhoods within the 12 subclasses (where such neighborhoods existed), giving a total of 18 main-study neighborhoods (in addition to two pilot neighborhoods).***

Once study neighborhoods had been specified, we began the process of identifying all the families in each neighborhood with a three-year-old child. Race (Black vs. non-Black), family structure (married vs. single), and sex of target child are factors of primary interest, and it was possible to obtain information regarding them for the families at the time of sampling. We then employed a stratified random sampling method within each neighborhood, choosing families within each of the 8 subgroups defined by family race, family structure, and sex of child. We aimed for a sample of 16 families from each neighborhood, giving two families in each subgroup if available. Of course, certain categories were not possible to fill (for example, Black families in certain of the white neighborhoods), and other subclasses were, therefore, correspondingly increased. This method of sampling resulted, as was our intention, in a higher proportion of Black and single-parent families than in the Syracuse area as a whole, and also made certain a substantial sample of ethnic whites. The response rate varied by neighborhoods, ranging from near 100% in certain neighborhoods to approximately 50% in others.

Both the work of other researchers and our own baseline analyses indicate that other demographic variables, such as the parent's work status and occupational level, ethnicity, and education, are also extremely important for understanding the support systems and perceptions of parents. Information bearing upon these variables was not available to us at the time families were selected, and therefore could not be explicitly structured into

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* A major effort was made first to define what we meant by a neighborhood and then to identify all the neighborhoods in the city of Syracuse and the suburban regions surrounding it. The process of defining neighborhoods began with the concept of a geographical niche, which we attempted to define in common with our colleagues in the four other countries, based upon natural and man-made physical boundaries, ethnic/racial, social, and cultural boundaries, and the location of neighborhood schools. Niches were then combined into neighborhoods, yielding units that included enough families with a child of the target age for purposes of programs and of analysis, but small enough to be relatively homogeneous and still retain considerable meaning as a neighborhood.

** The three neighborhood income levels, based on estimated median 1970 family income are: low (under $8,000), moderate ($8,000-$10,000), middle ($10,000-$13,500), and high (over $13,500). No high-income neighborhoods were included in the sample. The ethnic/race levels used were: city Black (over 50% Black); city mixed (10-49% Black); city ethnic white (30% or more first or second generation foreign born); and suburban non-ethnic white (under 30% Black and under 30% ethnic white).

*** In each of the 12 subclasses, if there were 3 or fewer neighborhoods, each was included in the study; if there were more than 3, we randomly chose 3.

our sample. Data on family income, for example, were not possible to obtain prior to the selection of the families; however, stratifying by the variables we chose, including neighborhood income, resulted in a good sample distribution across family income and other dimensions. Approximately half of the mothers in our study are employed (some part- and some full-time). Analyses focusing on the family-level factors have added maternal work status (not employed, working part-time, working full-time*) to the original design, and have divided non-Black parents into ethnic and non-ethnic groupings on their subjective identification with a particular culture or nationality and based on their ethnic background or heritage.** Ethnicity, in addition to being based on these individual expressions, is also defined in terms of the match between husband-wife dyads, resulting in a four-level variable ranging from "strong ethnicity" (where both parents are of the same ethnic group), to "mixed ethnicity," "weak ethnicity," and "non-ethnicity." This second approach allows us to incorporate the structural concepts of in-group marriage and out-group marriage into our analysis.

Table 2.1 shows our sample of neighborhoods by income and ethnic composition. Table 2.2 shows the overall sample in groups defined by family race, marital status, and sex of the child--three of the key factors that were used in stratifying the sample.

Baseline data were collected in 1978 and 1979. The 276 mothers received all instruments. Of the 182 two-parent families, 112 fathers participated in the study, receiving the Stresses and Supports and Social Networks interviews.

In addition to the experiment of nature, we have also been carrying out a program intervention. This program has emphasized the empowerment of parents with information and peer support. Programs were assigned on the basis of neighborhoods, with eight selected as controls and ten receiving the intervention. We attempted to achieve as good a balance as possible of each of the two original programs*** and of control across neighborhood income types and neighborhood ethnicity types. When it was possible to sample three neighborhoods per subclass, assignment of the three program conditions (including control), one to each neighborhood, was made randomly. Similarly, where there were two neighborhoods per subclass, once the decision had been made which two program conditions would be assigned to that subclass, the actual assignment to neighborhoods was random. The program assignment was not divulged to the program staff or to the field staff until after baseline interviewing had been completed in a given neighborhood. The results presented in this report are from interviews prior to program intervention.

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* Full-time work is defined as working more than 35 hours per week; part-time work is defined as from 4 to 35 hours per week, including some occasional workers; not working includes those who do not work and those whose work is extremely limited or irregular.

** Baseline analyses indicate that the dominant ethnic groups in our sample of non-Black mothers are Irish, Italian, Polish, and German. Non-ethnic categories include "General American Culture," English, Western European, Scandinavian, and "mixture."

*** After nine months of program operation, the home-visiting and neighborhood-clustering approaches were merged into a single Family Matters program.

Table 2.1

NEIGHBORHOODS BY TYPE AND INCOME LEVEL

Neighborhood	Suburban	City	City	City	
Income Level	Non-ethnic White	Ethnic White	Mixed	Black	Total
Low	0	0	2 (28)	3 (45)	5 (73)
Moderate	2 (31)	2 (33)	1 (16)	1 (15)	6 (95)
Middle	2 (32)	3 (44)	1 (15)	1 (17)	7 (108)
Total	4 (63)	5 (77)	4 (59)	5 (77)	18 (276)

( ) = Families

Table 2.2

SAMPLE DISTRIBUTION*

Race by Family Structure by Sex of Child

	Black		White		
Sex of Child	1 Parent	2 Parent	1 Parent	2 Parent	Total
Boy	20	11	28	79	138
Girl	30	17	16	75	138
Total	50	28	44	154	276

*Families completing all interviews

The Instruments

The Stresses and Supports Interview

How does one discover which concrete aspects of the ecological environment have an impact on developmental processes? Our ecological perspective suggests an answer to this question: one group that should know a good deal about what features of a given milieu affect human functioning are the people who live in that milieu. Accordingly, for the first approximation of the environmental conditions most relevant for the rearing of young children, we have turned to their parents. The Stresses and Supports Interview was specially constructed for this purpose--to identify sources of environmental stress and support experienced by each parent in each of a dozen domains existing both within and outside the home. The choice of domains was based on the free responses of parents to open-ended interviews conducted in a series of pilot studies. Half of these domains lie in what we have called the meso- and exosystems. Encompassed within the mesosystem are the various settings in which young children participate as they grow older and begin to move out of the home; specifically, day care settings, children's informal play groups, and the school. The exosystems that emerged in our pilot studies were primarily those involving the activities of parents outside the home; specifically, conditions of work (for both self and spouse), sources of income and financial security, family services, social organizations, and neighborhood conditions. The environmental forces operating within the home are assessed in four more domains of the Stresses and Supports Interview: housing conditions, housekeeping chores, the activities of the spouse and other household members, and, finally, the parents' perceptions of themselves and of the child.

Within each of these domains of the interview, two types of questions were employed: open-ended and concretely focused. The former were designed to elicit perceived sources and levels of environmental stress or support in the given domain (e.g., How is the care center working out?); the latter deal with objective conditions (e.g., During what days and hours is (Johnny, Mary) at the center?).

The interviews are analyzed to determine "units" that represent self-contained expressions of stress or support (negative or positive views). Each unit is coded for content including: the subject (who is experiencing the stress or support); the sources (the domain, e.g., neighborhood, with further differentiation, as appropriate, by subdomains; people; and themes that can be applied to a variety of domains, e.g., conflict with others, age of child, shared values); and valence and intensity (on a scale of -3 to +3). Units are also coded to indicate whether the source is in the past, present, or future. The coding scheme is devised so that variables can be constructed at any level of aggregation and can be based on various combinations of themes, people, and specific domain areas.

The Social Networks Interview

Because our interest is as much in describing the social ecology of family life as in measuring amount and kinds of social support, our procedure for generating original (baseline) network membership differed from that used by most other researchers (Fischer, in press, and Wellman, 1979). Instead of identifying members through a series of exchange-related questions ("Can you tell me who you turn to for emotional support?"),

we began with a general definition of what constitutes membership ("People who make a difference to you, and are important in one way or another"), and then asked the respondent to apply that phenomenological definition to categories of people characterized by well-known roles and contexts (neighbors, relatives, work- or schoolmates, people in agencies or organizations, etc.). Information was then gathered about the content exchanges and leisure-time activities that the parent engages in with his/her "network members," thus distinguishing a functional from a more peripheral social circle. A third and more primary circle was then distinguished by asking the parent to indicate the "most important" network members from the rest of the list and to talk about why they were important. The interview concluded with the collection of basic background information about the members of the primary and functional circles.

The Child-Caregiver Activities Interview

The Child-Caregiver Activities interview was designed to yield data bearing on the actual behavior of parents with their children. In an interview conducted with the mother, she was asked to describe the activities of the morning, afternoon, and evening of the previous day, with particular reference to the target child, but including the activities of all persons in the child's presence.

The data yielded by the interviews have been subjected to content analysis utilizing a code based on an ecological model of the microsystem as a context for human development. Specifically, all reported or observed activities are classified along three dimensions: initiative, content, and structure. Initiative refers to whether the activity was instigated by the child or by some other person. The content categories were derived from our experience with pilot studies and baseline data. The categories include: negative affect; positive affect; television; play; object play; motor play; productive play; games; educational games; fantasy; passive recreational activity; active recreational activity; shopping (recreational activity); active school-related recreational activity; passive school-related recreational activity; lessons; educational activities; general conversation; school-related conversation (social-peer group); school-related conversation (cognitive); school-related conversation (activities); self-care; assigned self-care; chores; assigned tasks; caregiving; and helping.

Structure refers to whether the child's activity is engaged in jointly with another person, is related to but not joint with another person's activity, or is isolated from the activities of others. The identity of the other person(s) involved in the activity is also coded. Structure is further described by the power relation: the child's power (control) in the activity is greater than, equal to, or less than the others involved, for non-isolated activities.

Analytic Methods

We are engaged in the study of the comparative ecology of human development. This section considers the implications of this approach for the analytic methods employed by the project. An important component of the ecological perspective is the hypothesis that human behavior is explained in part by influences of the immediate setting as well as by external settings, that both are essential to an adequate understanding of this behavior.

Thus, the primary purpose of our study has from the beginning been to examine the family as a childrearing system and the effects of different ecological contexts on the effectiveness of this system. A central reference is Bronfenbrenner (1979).

What are the primary methodological implications of the ecological perspective? The core of our statistical analyses involves single-equation models, using regression techniques (including analysis of variance and covariance). These models frequently involve specifying different regressions for each major family type in the model (analysis of homogeneity of regressions), random as well as fixed factors (mixed models), the simultaneous examination of group and individual effects, and repeated measures on the dependent variables. Relevant references for these methods are Searle (1971), Henderson and Henderson (1979), and Henderson (1982). We now discuss the relation of these methods to the research questions. Two essential concepts are: to achieve a full representation of ecological influences by as complete model specifications as possible; and, for a given model, to examine fully interrelations among effects in the model.

The importance of context implies the importance of an attempt to account for all relevant ecological influences. This perspective is not, of course, unique to human ecology -- it should apply to all research. In our field, however, the challenge is greater owing to the very large array of potential variables that usually must be taken into account, and the frequent occurrence of "empty" or near-empty niches -- intersections of levels of important variables that contain few or no families.

As anyone who attempts to understand data realizes, there exists no single "correct" analytic strategy. Typically, only some of the important theoretical considerations can be taken into account at any one time; models can only represent some of the real-world phenomena that the researcher thinks are important. Our approach is based on the belief that it is essential first to gain an understanding of the most basic relations among variables, and that analysis of variance and analysis of covariance (including homogeneity of regressions analyses) are the appropriate methods to examine these relations. To model properly a system of relationships, we recognize that simultaneous equations models should at least be considered. A thorough understanding of the basic relations among the variables in the system is, however, a prerequisite to an informed use of models involving simultaneous equations and latent variables, which should not be used as an all-powerful substitute for the first stage. Thus, the remainder of the discussion here deals with the earlier stage, and the analyses presented in this report are based on such analyses.

The examination of the effects within an ecological system implies the examination of relationships among variables. Further, ecological theory postulates that relations frequently differ by contexts: interactions among variables are the rule, and it is in these effects that the true complexity of ecological reality will usually be understood. Testing interactions among categorical variables is familiar. The test of homogeneity of regressions, discussed below, is, in effect, the test of an interaction between a continuous variable (such as income) and one or more categorical variables (such as sex of the child). Interactions among continuous variables are frequently also implied by substantive theory. It is at this level of analysis -- the examination of interactions in single-equation models -- that we are currently involved, and this is reflected in the results reported in the other chapters constituting this report. Does, for example, the ethnicity or the work status of a mother -- or do these factors in combination -- influence her perception of her child or the amount or type of activities she engages in with the child? Here, ethnicity and work status are categorical independent variables. Additionally, we are interested in the relation between family income, a continuous independent variable, and parents' perceptions

of the child. Typically, we are interested in whether these regressions are the same for various model subgroups. Also, the validity (more precisely, the interpretation) of comparisons of means for, say, ethnicity, adjusting for income or other continuous variables, depends upon the comparison of subgroup regressions.

We now briefly discuss the model for analyzing homogeneity of regressions. Details are given in Henderson (1982). Assume for simplicity that there is a single continuous independent variable -- for example, the degree of network emotional support. Consider a simple classification structure, with mother's ethnicity (strong ethnic vs. weak ethnic vs. nonethnic) and maternal work status (not working, working part-time, and working full-time) as (fixed) classification factors; the logic extends to models with additional factors and multiple continuous variables. The mother's positive perceptions of the child is the outcome of interest. In this model, one question to be examined is whether there are mean differences in perceptions for mothers in the three work groups (or in the three ethnic groups) adjusting for the level of network emotional support. This is the standard analysis of covariance. It is conventional wisdom that tests of mean differences should not be made if the regressions of perceptions on emotional support differ across the work-by-ethnicity subgroups. This condition is, however, unnecessarily broad. For any given test of mean differences to be valid (in the sense that the test is invariant in prediction to the value of the covariate), it is only necessary that a specific function of the subgroup regressions (one that is identical to the given function of the subgroup means) not differ significantly from zero (that is, be homogeneous).

Frequently our primary questions of substantive interest can be expressed in terms of whether the subgroup regressions differ. We are interested in, for example, the question of whether the relation between mothers' perceptions and emotional support is the same for ethnics as it is for non-ethnics. Thus, the model that tests for mean differences (and examines the validity of these tests) also provides the information to study this other type of question.

Each effect in our models is tested adjusting for all other terms (all classification factors and interactions, and all covariates), averaging equally over levels of cross-classified fixed factors (i.e., a weighted squares of means analysis). We have also in some cases tested the hypothesis implied by a weighted average over levels of cross-classified factors, where the weights were the sample subclass sizes. This was done as a precaution against effects caused by small numbers in certain subclasses in some models. In fixed models, each of these approaches results in an exact test, although, of course, of a different hypothesis.

Qualitative Methods

One of the limitations of statistical analysis is that while it is very useful for the identification of differences in the data, it often cannot provide the information needed to explain those differences. We have tried to protect ourselves somewhat from that eventuality by supporting our quantitative methods with a serious commitment to qualitative analysis. We agree with Campbell (1974) that quantitative knowledge is and needs to be grounded in qualitative knowing. Weiss (1980) points out that a dual reliance on quantitative and qualitative methodologies is particularly appropriate to the study of development-in-context, because it promotes holistic description and understanding and provides possible causal explanations and models of how systems actually operate.

To date, we have used the qualitative approach to synthesize rich descriptive data from several different sources (e.g., neighborhood descriptions), to articulate the meaning of life decisions made by clusters of individuals in our sample (e.g., women working outside the home), and to distinguish among marital status types occurring too infrequently in the data set to permit meaningful statistical analysis (differing categories of "single" parents such as those living with partners and those living with parents). Future qualitative analysis will be used to accomplish two primary purposes: to understand processes taking place in subsamples too small to be addressed statistically but important enough to require sustained attention; and to provide at least tentative causal explanations for group differences or changes over time discovered through the use of statistics, but for which no clear explanation can be found.

Once a domain suited to qualitative examination has been established, those data are analyzed using the general steps (Denzin, 1970; Glaser and Strauss, 1967; Guba, 1978; Mintzberg, 1979; Patton, 1980; Rist, 1977; Schatzman and Strauss, 1973; Weiss, 1979): 1.) clear specification of the research question and background information; 2.) immersion in the data; 3.) development of initial analytic categories; 4.) creation of classification systems; 5.) creation of typologies and explanation of processes; 6.) hypothesis formation and testing; 7.) negative case analysis; 8.) logical cross-classification; 9.) development and testing of alternative explanations.

CHAPTER 3

MATERNAL EMPLOYMENT AND MOTHER'S DESCRIPTIONS OF THEIR THREE-YEAR-OLD CHILDREN

William Alvarez, Charles R. Henderson, Jr., and Urie Bronfenbrenner

Mothers are working outside the home in ever increasing numbers, with the greatest increase among those with children under three years of age. This change is associated with at least two historical events. The first is the unprecedented period of double-digit inflation combined with high levels of unemployment. Headlines focus almost daily on the closing of factories, layoffs, and a generally depressed economy. The second event is the ideological shift in our society toward a greater acceptance of, and even expectation for, women to work outside the home. The impact of this social change on the socialization of children is the primary focus of this chapter.

Theoretical Background

A recent review of research on work and family life (Bronfenbrenner and Crouter, 1981) pointed to the continuing use of research paradigms in which differences among children were explored using as the sole criterion whether the mothers were employed full-time or remained at home. This approach to research reflects what Kurt Lewin termed the class-theoretical model (Lewin, 1935). It can be thought of as the study of differences in parents and children in different social contexts. More importantly, observed differences in children are often explained simply as attributes of children in a given context. While this approach may be useful in descriptive studies and as a pointer toward fruitful areas for exploration, it remains incomplete. In such a paradigm, issues of causality and linkages between social contexts and outcomes cannot be understood. At an even more basic level, differences are often entirely missed because of the overly broad terms in which the social environment is defined.

It is not surprising to find, from a review of the literature, that there are no universally predictable effects on the child when the only control examined is whether or not a mother works outside the home. In those few instances where research designs have been more sophisticated and the environmental effects more fully specified, maternal employment does appear to exert influence. These effects are observed under certain conditions defined by particular combinations of the age and sex of the child, the family's position in society, and the nature of the mother's work as specified both in objective and subjective terms (Bronfenbrenner and Crouter, 1981).

A review of findings on maternal employment and academic achievement points to the importance of the sex of the child as a key variable (Hoffman, 1980). The studies indicate that daughters benefited from being in families where the mother worked; the findings for sons were not as clear. If anything, the context of mothers working outside the home had a negative effect on the achievement of sons. Although tenuous, this negative impact appeared to be further qualified by social class. Sons of working mothers were at a disadvantage if they were from middle-class families and at an advantage if from lower-class families. While this pattern represents an inconclusive composite of findings from previous research, the necessity of including the sex of the child, in addition to an indicator of socioeconomic status, in studies of maternal employment is clear.

The importance of specifying the social environment in detail is evident. A second issue is how differences across contexts emerge; more research is needed to further understand the intervening structures or processes through which the environment might affect the course of development. Such studies involve an analytic shift to what Bronfenbrenner has called the "process-by-context" model. This approach involves the search for differential relationships within differing contexts. The fruitfulness of this approach is evidenced by Glen Elder's seminal work studying the long-term effects on children of the Great Depression (Elder, 1976). The impact of economic loss depended on the age and sex of the child, as well as the social class of the family. Elder demonstrated that the effects -- both immediate and future -- of a socio-historical event such as the Great Depression depend considerably on the social context.

To study the process through which maternal employment may affect the child, we chose what we considered to be an important linking variable, the mother's perception of her child. This perception is the result of an evolving interactive process, and it has an impact in terms of the child's socialization. That is, to the extent that mothers' positive or negative views of their children have developmental consequences, they are relevant outcome measures as well as conceptually important linking variables. We therefore took as our first task the study of whether any differences in perceptions exist across social contexts as defined by mother's work status, sex of the child, and mother's educational level.

The measure of mothers' perceptions was derived from their response to an open-ended question: "We have been talking about (target child); could you tell me something about what s/he is like?" The mothers' accounts were divided into codable units, which were classified on a number of dimensions. One of these dimensions was whether a comment implied approval or disapproval of the child. The positive or negative response was then rated on a two-level scale of intensity. By summing these weighted responses, two overall scores reflecting perceptions of the child were obtained, one measuring the degree to which the mother attributed positive characteristics to her child, the other the degree to which she made disapproving comments. We restricted the analysis reported here to the sample of 152 white, married mothers, and used an analysis of variance design including three classification factors: the mother's employment status (working full-time, defined as 35 hours per week or more; working part-time, between 4 and 35 hours; or remaining at home); the sex of the child; and the mother's educational level (no more than a high school education vs. some education beyond high school).

Results

Only the mothers' positive perceptions differed significantly for the three model factors. The effect of work status on the mothers' approving comments about their children differs by the sex of the child (the sex-by-work-status interaction is significant, with $p=.005$). Boys are viewed most positively by mothers who work part-time. In contrast, mothers working full-time portray their sons least favorably. When we look at daughters, it is working mothers, whether employed full- or part-time, who express the more positive view. More lukewarm descriptions of girls are given by mothers who do not work outside the home. In sum, part-time employment is associated with a strongly positive picture of sons; in the case of daughters, the halo extends to full-time as well as part-time employment.

This pattern is further qualified by the influence of the mother's educational level, in a significant three-way interaction ($p=.03$). In general, the benefits of schooling enhance the mothers' positive perceptions of their children, but they do so in a selective fashion. Mothers working part-time are especially positive in their comments if they have had some education beyond high school. This tendency holds for children of either sex. Among mothers who work full-time, the increase in positive view of the child as a result of additional schooling is much greater if the child is female rather than male. The situation is reversed, however, for mothers who do not work outside the home, with sons rather than daughters benefiting from the mother's higher educational status. The differential effect of education for mothers working full-time vs. those remaining at home is highly reliable -- the work status (not working vs. full-time work partitioned contrast) by education by sex interaction has $p = .01$; the corresponding three-way quadratic interaction (part-time work vs. the other two work groups) is nonsignificant.

Taken as a whole, these findings indicate that the relation between work and family life differs for mothers from contrasting educational backgrounds and also depends upon the sex of the child. More maternal schooling enhances the positive perception of sons, but leaves the work status profile unchanged. Sons of mothers working part-time remain in the most advantaged position; those whose mothers work full-time are least favored. In the case of girls, however, more schooling for the mother produces contrasting results. Whereas daughters of mothers with a limited education are worse off when the mother works full-time, this same employment status is by far the most conducive to positive attitudes about daughters of better-educated mothers.

To describe the same pattern in another way, mothers with education beyond high school who also work full-time are the most enthusiastic about their daughters and have the least positive view of their sons. The sex difference is reversed for mothers who work outside the home only part-time or not at all; although the trend is not as strong, these mothers tend to be more pleased with their sons than with their daughters. Mothers with no education beyond high school generally view the child less positively than their better-educated counterparts. Looking at the most extreme cases, to the extent that mothers' perceptions of their children have developmental importance, the optimal situation for the boy appears to be having a mother with some education beyond high school who is working part-time. For the girl, the best position is as the daughter of a well-educated mother who works full-time. The worst arrangement for both sexes is full-time employment by a mother with no more than a high school education. Since education is partially confounded with type of job, the education-by-work-status interaction may in part be an occupational effect. This possibility is a question for additional study.

Discussion

The results clearly indicate that mothers' perceptions do vary across different social contexts. They also demonstrate the importance of not defining the social environment in overly broad terms. Had mothers working part-time or full-time been lumped into one category of work, the nominal results would have been quite different. It would have appeared that working was beneficial for only one group -- daughters of higher-educated mothers. Such a finding would have been supported by previous research, but would not have told as complete a story.

Of greater interest, however, is the question of whether the present findings demonstrate a potential for understanding a process by which maternal employment affects

children. Specifically, do mothers' descriptions vary in a coherent and systematic fashion across work-status groups? To investigate this issue, we returned to the interview protocols. The qualitative review added considerable richness to the analysis.

When we examined how mothers' descriptions of their sons varied by work status, an interesting pattern emerged. Across the board, sons were generally portrayed as being active and independent. What differed, though, was the extent to which this independence was described in positive terms. Mothers who worked part-time expressed this attitude frequently.

> He's extremely independent . . . He's all boy.
> He's very outgoing, has a mind of his own which is really good, because
> I don't think anyone will get the better of him. . .

Independence and activity were often spoken of in negative terms, however, by mothers who worked full-time or remained at home. Mothers working full-time sometimes spoke of the lack of energy to deal with this activity after a long day of work and described their sons as very demanding and stubborn.

This sense of a mother taxed by the demands of full-time work and household responsibilities was also seen in attitudes not expressed by this group in their descriptions of their sons. Unlike mothers remaining at home or working part-time, they did not report receiving pleasure from their sons' conversations.

When we looked at mothers' descriptions of daughters we found that, in support of the statistical findings, the mothers' educational levels affected the way their views varied by work status. Overall, positive descriptions of daughters tended to be couched in terms related to companionship, affect, and independence.

Mothers in the less educated group spoke mainly in terms of their daughters' affect and the companionship they received from having them around. This was especially evident in descriptions by mothers who remained at home or worked part-time.

For mothers with more than a high school education, working was associated with an additional set of positive descriptors. These working mothers used terms such as 'independent' and 'intelligent,' along with 'caring' and 'sensitive,' in describing their daughters.

> She's pretty intelligent. She's independent ... and loving. She is her own person. She enjoys doing all sorts of things. I love having her around, she adds to our life, the things she tells me, doing things with her.

Although remaining at the descriptive and anecdotal level, these examples complement previous research on maternal employment. More importantly, they lend credence to the conceptualization of mothers' views of their children as a pivotal linking variable to child outcomes. We are now in the process of testing empirically some of the issues raised by the qualitative analysis.

There are two primary questions to be addressed. The first is: what are the factors in the social environments of working mothers that affect the positive perceptions of children? This encompasses such issues as: whether maternal employment is motivated primarily by financial need or more intrinsic reasons; the level of satisfaction with child

care arrangements; and the degree to which the husband is supportive of the wife's employment, both emotionally and through child care and housework.

We have some preliminary findings regarding the role of the father. When we examined the relationship between positive descriptions of the child and the amount of stress and support the mother reported receiving, we found a differential set of relationships depending on the roles in which the mother was involved. There was an overall positive relationship ($p=.05$) between favorable descriptions of the child and positive perceptions of the spouse. A closer examination, however, revealed that support from spouses was especially salient for one group of mothers -- those working full-time. This "second-order effect" fits nicely into the process-by-context model. To put the result another way: the degree to which the mother perceived the spouse positively facilitates a positive view of the child, especially in the particularly stressful context of both parents working full-time.

For mothers remaining at home, we once again find evidence for a second-order effect, specifically that the spouse is a link to the external world. The degree to which the mother viewed the husband as receiving support from the environment outside the home was significantly related ($p = .005$) to a more positive description of her child. In a complementary finding, mothers remaining at home who were most positive in describing their role as a homemaker viewed their children more favorably ($p=.05$). Perhaps even more important, the reverse was also true: the more stress the mother reported in terms of her role as a homemaker, the more negative comments she made about the child ($p=.01$).

The second question is perhaps more intriguing: how do these differences in perceptions evolve within contexts over a period of time? It is here that the follow-up data collection, three years after baseline, will make a unique contribution to the process-by-context paradigm. In addition, we are currently in the process of gathering data from both mothers and teachers about each child's progress in first grade. Thus, in the not-too-distant future, we will be able to see whether context-specific perceptions of sons and daughters are sustained over time, and whether they bear any relationship to early progress in school.

Table 3.1

MOTHERS' FAVORABLE COMMENTS ABOUT THEIR CHILDREN

Means by Maternal Employment Status and Sex of Child*
(Number of cases in parentheses)

	Boy	Girl
Not Employed	3.21 (46)	3.19 (46)
Employed Part-Time	5.36 (12)	3.90 (16)
Employed Full-Time	2.28 (20)	4.06 (12)

* White, two-parent families only; work-status-by-sex interaction significant at p=.005.

Table 3.2

MOTHERS' FAVORABLE COMMENTS ABOUT THEIR CHILDREN

Means by Maternal Education, Employment Status, and Sex of Child*
(Number of cases in parentheses)

	Mother's Educational Level			
	High School or Less		More than High School	
	Boy	Girl	Boy	Girl
Not Employed	2.65 (29)	3.38 (29)	3.76 (17)	3.00 (17)
Part-Time	4.71 (7)	3.22 (9)	6.00 (5)	4.57 (7)
Full-Time	2.00 (13)	2.40 (5)	2.57 (7)	5.71 (7)

*White, two-parent families only; third-order interaction significant at p=.03.

CHAPTER 4

NEIGHBORHOODS AS CONTEXTS FOR CHILD DEVELOPMENT

Heather B. Weiss

Introduction

One of the most important premises underlying the research and intervention efforts of the Comparative Ecology Project is the recognition that parents are embedded in larger structures that influence their capacity to grow and rear their children (Bronfenbrenner and Cochran, 1976; Bronfenbrenner, 1979). Specifically, it is argued that "in order to understand what is happening in families and how they function as contexts for human development, it is not enough simply to examine the internal states of individuals, or even the interaction patterns of family members as they go about their daily activities inside the home" (Cochran and Woolever, 1981). Rather, it is crucial to examine interactions with those external forces that help to shape families as developmental systems. The ecological approach, as a guide to research and action, therefore impels us to look beyond the borders of the family to the larger systems in which it is embedded if we are to understand and support the child's development. One of the most proximate and potentially coercive of these larger systems is the neighborhood in which the family lives.

From the outset, understanding and influencing the effects of neighborhood ecology on child development have been key elements in both the project's research and its program designs. This is evident in the selection of neighborhoods per se as the initial sampling unit, in the implementation of programs on a neighborhood basis, and in the development of programs designed to enhance the social ecology of neighborhoods. This analysis of the data on the project's Syracuse neighborhoods, in turn, has been guided by the project's dual effort to understand and influence neighborhoods as contexts for development. Hence, while the work focuses mainly on specifying some of the ways in which the ecology of the three-year-old's neighborhood may affect his or her development, some thoughts are also offered about elements in a neighborhood's social ecology that influence whether or not neighbors will band together more closely to foster the development of neighborhood children and their families. This chapter begins with a selective review of the literature on neighborhoods to describe and explain the conceptual scheme undergirding the analysis of the neighborhood data. The review is followed by a brief description of the primarily qualitative analytical methods used in the data analysis. The analysis of the data from the Project's ten program neighborhoods suggests that these neighborhoods differ in the nature and amount of support that they provide to families with small children. Specifically, there are three dimensions of a neighborhood that are especially important to the project's parents: physical characteristics (parks and yards, for example), demographic characteristics (age, race, and income of neighbors, for example), and social ecology defined in terms of the parents' perceptions of the ways in which the interactions of people in the area affect their parenting and their children's activities. Each of these dimensions will be discussed in turn.

Related Studies

Researchers who study neighborhoods recognize that there is no current clear conceptualization of what a neighborhood is. In her extensive review of the literature on urban neighborhoods, Keller (1968) found that neighborhood was an ambiguous term; more recent commentators have also focused on this conceptual confusion and on the complexity of unraveling neighborhood systems and their influence (Hojnacki, 1979;

Miller, 1979). One of the factors that makes the conceptualization and delineation of neighborhoods so problematic is that geographic and subjectively defined boundaries frequently do not coincide. Some neighborhoods are easily defined because of geographic isolation, compatible and homogeneous residents, or historical tradition. Others have few, if any, such easily identifiable markers. This has led some to conclude that a self-definitional approach is a useful starting point for neighborhood research (Hojnacki, 1979). Simply put, "a neighborhood is what the people who are there say is a neighborhood" (Berger and Neuhaus, 1977, p. 9).

The project has taken this subjective (or phenomenological) element into account in several ways: initially, in helping to draw neighborhood boundaries, and subsequently, in the use of semi-structured and open-ended interview questions permitting the parent to delineate the neighborhood and define its important attributes.

An examination of the literature linking children and their development to neighborhoods reveals several points. First, it is a small literature. Although much has been written about neighborhoods, little has been written specifically examining their impact on the child or parent per se. Many researchers limit their conception of neighborhoods to geographic, physical, and demographic properties. These properties alone, however, do not capture the particular dynamics of a neighborhood as they influence families raising small children. As Gump (1976) argues from the standpoint of ecological psychology, neighborhood ecologies are not passive, but actively coercive in the ways they shape the activities of everyday life. It is this active, dynamic aspect of neighborhoods which I will refer to as their social ecology. In his review of the literature on children and the urban environment for the University of Toronto's Child and the City Project, Michelson argues that the link between child and environment is not a deterministic one; rather, the "environment is generally enabling or constraining, seldom vetoing or determining" (Michelson, 1979, p. 423). He suggests that the causal relationship between child and environment is better conceived either in terms of the spatial opportunities the environment affords the child or in terms of the ways in which adult social organization creates and affects the child's environment. Hence, the relationship between the child and the neighborhood may be direct or indirect as mediated through parents and other adults in the area (Michelson, 1979; Bronfenbrenner, 1979).

Suttles's (1972) studies of Chicago neighborhoods also alert us to the necessity of going beyond physical descriptions to examine ways in which social dynamics shape residents' perceptions of their neighborhood that allow them to negotiate the territory. They differentiate between people and areas that are safe or unsafe. Such cognitive maps "are a creative imposition on the city," he argues, "because they provide a final solution to decision-making where there are often no other clear cutoffs for determining how far social contacts should go" (p. 22). People actively develop "defended neighborhoods" to set themselves off from others and to give them some sense of control over their social and physical space (Suttles, 1972). Suttles argues that the defended neighborhood reflects more than simply racial or ethnic factors, and that the site of the defended neighborhood varies according to the sense of control of the residents. In dangerous urban areas, the residents' "defended neighborhood" tends to be smaller than in a suburb. The presence of children, according to Suttles, is an important factor in parents' perceptions and shaping of the neighborhood. Although the size of the defended neighborhood may be smaller in lower income areas, there, too, he found that mothers describe their neighborhood in terms of an area that "acts a a sort of container which helps keep together an informational network surrounding ... the child" (Suttles, p. 40).

Finally, the project's ecological perspective and research in line with it have sensitized us to the multi-dimensional relationships between the child's development and his or her neighborhood. As developed by Bronfenbrenner (1979), the ecological approach, in particular, directs our attention to how the child develops interactively with the environment and how the larger environment affects what goes on within the child's immediate family setting. Bronfenbrenner has also stressed the importance of phenomenology -- the way in which parents' perceptions can influence their behavior. As sociologists noted earlier in the century, things that people believe are real, are real in their consequences. The ecological orientation, then, directed us to look at certain features of the neighborhood and to collect both objective information about physical and demographical characteristics of neighborhoods as well as parents' own more subjective perceptions.

The importance of these features of the ecological approach as specified by Bronfenbrenner (1979) and by Cochran in his work on social networks (Cochran and Brassard, 1979) is established in the neighborhood work of another child development researcher who employs the ecological approach. Garbarino (Garbarino and Sherman, 1980) studied two neighborhoods, one at high and the other at low risk for child abuse, to see how they differed. He found that parents in the high-risk area, though socioeconomically and demographically similar to those in the low-risk one, had less positive evaluations of the neighborhood for their childrearing and a general pattern of "social impoverishment" (p. 188). They found that the areas at high risk for child abuse had the following characteristics: low levels of exchange among neighbors, high mobility among residents, restricted interaction among children, poor housing, and "a pervasive pattern of social stress" (Garbarino, 1981, p. 18). These results suggest that simply examining socioeconomic and demographic differences among neighborhoods does not capture some of the crucial differences among neighborhoods as contexts for childrearing. Garbarino offers a challenge in this regard. He argues that to speak with validity about a "neighborhood effect," we need to "show that 'the whole is greater than the parts,' that the same family would be more at risk in one neighborhood than another" (Garbarino and Sherman, 1980, p. 196).

Procedures

The Ecology Project is developing a combination of quantitative and qualitative research techniques to address the question of neighborhood effects.* This combination has guided both data collection and analysis. Initially, parents were asked primarily open-ended questions in order to delineate areas of family and neighborhood interaction. Analysis of the responses enabled us to develop a set of closed-ended questions designed to tap the important dimensions of this interaction. This chapter is based primarily on the qualitative analysis of the perceptions of parents in the project's ten program neighborhoods. Demographic data shedding light on a neighborhood's social ecology are also presented.

The procedures guiding the qualitative analysis included a search for recurring themes and the substantiation of their importance and procedures through comparative analysis and the search for negative cases (Weiss, 1980; Glaser and Strauss, 1967; Wiseman, 1974). As a result of this process, the analytic categories shaping the intepretation come in good measure directly out of the data. The parents' perceptions

* For further details about this combination, see Chapter 6, "Families & Neighborhoods" in Cochran, Bronfenbrenner, Cross, Henderson, Weiss, and Campbell (1981).

of their neighborhoods fall into three general categories: physical properties, demographic and socioeconomic characteristics of residents, and views of the social ecology and its impact on parenting and children's activities. The following sections describe the ten neighborhoods, the results of the analysis of each of the general categories, and speculate about neighborhood effects on children and on programs designed to strengthen neighborhood ecology.

Overview of the Neighborhoods

One of the main criteria the project used to select study neighborhoods was neighborhood socioeconomic status. As Table 4.1 shows, the ten program neighborhoods range from poor inner-city areas to middle-income suburban areas. If one were to drive through these neighborhoods, some of their socioeconomic differences would be immediately obvious. At one end of the scale is the LBJ Triangle. It is a low-income, racially mixed area within the city, heavily interlaced with commercial establishments, apartment buildings, bars, and small pockets of deteriorating housing. The houses have yards that are unkempt, full of weeds, and are as one mother described them, "like a wasteland." Housing occupancy is sometimes difficult to determine in the more dilapidated areas; it is primarily indicated by "beware of dog" and "no trespassing" signs. There is a great deal of traffic through the neighborhood, which curtails mobility, especially for children. Although there are many stores in the area, the residents complain that the prices are too high, so many prefer to shop outside the neighborhood. The LBJ area is very active, day and night. Groups of teenagers "hang out" at various corners. As the table shows, only twenty percent of the project families in the neighborhood own their own homes; the majority live in apartments. While the other two low-income areas have their own personalities, they share many of the same aspects with this one.

At the other end of the scale is Schiller-Wadsworth, a homogeneous middle-income residential area also in the city. Driving through Schiller-Wadsworth, one sees primarily comfortable-looking houses on tree-lined streets. All the commerical activity is located in one area and consists of small shops; there are no factories or offices. The houses are all for one or two families and are in good repair; the area's one apartment building is not conspicuous. Traffic is "virtually non-existent" on the majority of streets. Schiller Park, one of Syracuse's safer parks, is located here. It is large and contains a variety of recreational facilities. One project observer summed up this neighborhood as "close to the city but far removed from it in terms of the daily activity of the neighborhood." About 75 percent of the project's families here own their own homes, and only three of the sixteen live in apartments. Again, although each of the other six moderate- and middle-income neighborhoods has its own distinctive character, they, too, have many common features that contrast with those in the lower-income ones.

Perceptual Themes

The parents' perceptions of their neighborhoods' physical aspects fall into two categories: general descriptive statements, and discussions of the availability and desirability of recreational areas for families with small children.

Unlike the parents in the moderate- and middle-income areas, those in the three low-income areas rarely took the opportunity provided by an open-ended question to

comment generally on their physical surroundings. They rarely mentioned negative features noted independently by project observers. What some of the parents in the lower-income neighborhoods did note is their lack of control over the choice of where to live. "If I could move into a nicer place, I would," one mother said, "but I can't, so this is home, and it's okay." "It's okay," another said, "besides, right now, where else am I going?" Having the wherewithal to choose where you will live and raise your family differentiates the seven more affluent areas from the three low-income ones.

The availability and consequences of access to safe recreational space for children was a very frequently mentioned theme. Recreational areas, whether parks or yards, are viewed as important for the opportunities they afford both parents and children. They provide another setting where children can meet others and engage in outside activities. For parents of three-year-olds, such space, especially in the form of a yard, provides the opportunity for parent and child to play outside together or, alternatively, to get away from each other for awhile. As one mother with several bedrooms and a yard explained, "When the kids get on my nerves, I can always go into another room and close the door or send them outside to play."

The availability of safe parks and yards is unevenly distributed among the neighborhoods. Most of the seven upper-income areas appear to have relatively safe nearby parks and playgrounds. Two of the three lower-income areas have parks, but the parents feel they are too dangerous to use. They are dominated by teenagers who drink and use drugs, and are strewn with broken glass. Adolescents appear to be a constraining aspect of the neighborhood ecology, particularly in these low-income areas. As a result, the parks are physically available but functionally unavailable.

As Table 4.1 shows, the program families in low-income areas are also less likely to own or live in single-family houses with accompanying yards. Ten of the fourteen families in Lexington-Fayette, for example, mentioned that their children had no place to play. Six also mentioned that their apartments were too small and as a result, one mother said, it is "like living somewhere really cooped up and very unhappy with no place for the kids to play." Cramped quarters and no outside play space are likely to create a situation in which parent and child are more likely to get on one another's nerves. Presumably this situation is exacerbated when neither parent nor child has much access to other settings through childcare or work, for example.

The importance of these physical characteristics should not be underrated. The interviews suggest that the absence or presence of recreational facilities, for example, can create daily stress. However, from the overall analysis of the parents' evaluations of their neighborhoods, it is apparent that at least for these Syracuse parents, it is the people who define the characteristics of the neighborhood and have the most impact on parenting and children's activities. The parents frequently characterized their neighborhoods in terms of certain selected characteristics. These included the age and socioeconomic status of neighbors, interpersonal safety and distance, and the area's residential stability or instability.

The ages of both children and adults in surrounding families was one of the most frequently used criteria of neighborhood evaluation, especially in the seven more affluent areas. Parents either complained that there were no other young families in their stage of the life cycle, or expressed satisfaction that there were. Although the evidence is not strong, the interviews hint that in areas where there are other young families, there is more likelihood not only of friendship and sociability but of reciprocal exchanges of child-rearing support and information. "I like older people," one mother said, expressing the

sentiments of many others, "but it would be nice if there were some young families, more people I'd have things in common with and with children my child's age." The presence or absence of peers for one's children to play with was an almost universal criterion for neighborhood evaluation among the parents in the seven moderate- and middle-income areas. Parents in the three low-income areas rarely mentioned the lack of agemates for their children. Their concerns with other children fall into the physically available but functionally unavailable category for reasons that will be explained in the next section on neighborhood social ecology.

Three sociodemographic features of neighborhoods that social scientists frequently employ to compare and evaluate neighborhoods were not paramount for the parents. The socioeconomic status of neighbors was mentioned less frequently, but when it was it tended to be expressed in terms of others' concern with the care of their property and of shared childrearing values. The racial and ethnic characteristics of the neighbors were mentioned less frequently than anticipated. Parents in two middle-income neighborhoods frequently cited diversity as a benefit, particularly because it would expose their children to people of different backgrounds. Parents in some of the lower-income neighborhoods felt that the existence of other racial groups restricted their movement and jeopardized the family's safety. Finally, although some of the neighborhoods have many single parents, this was very rarely noted. It is unclear whether these sociodemographic characteristics of the neighborhoods are so obviously important that they are not mentioned, or are relatively unimportant when these parents evaluate their neighborhoods as settings for childrearing.

Issues of personal safety and fear of people in the neighborhood come up fairly frequently in the low-income areas. Parents link their concerns and fears to both children's activities and to their and their children's sense of well being. "I can't even let my kids go out and play unless me or my husband go out and watch them," a mother in Lexington-East Fayette said. "The teenagers smoke reefers in the hallways and drink wine, and I don't want my kids exposed to that." Other parents explained that the way they cope with these dangers is to limit where their children can go. The following statement by a Tallman-South mother represents the views of a number of parents in the lower- income areas. "We're not that safe...there are a lot of criminals on the South Side. We mostly stay in the house and keep to ourselves." In sum, these parents are reluctant to let their children play in a very wide area and they live with the daily stresses of concern for family safety. Occasionally parents in the moderate- and middle-income areas mentioned issues of personal safety, but burglary and theft perpetrated by outsiders are more frequently mentioned issues.

Regulating the social distances between neighbors and controlling intrusiveness were also persistent themes. The majority of parents commented about interpersonal distance, whether it was in terms of the neighbor's noisiness or nosiness, the need for privacy, the value of neighbors who mind their own business, or the need for close personal friendships with neighbors. Personal privacy is a very salient issue in the three lower-income areas. Parents there frequently evaluate their neighborhoods on this dimension. Most often they complain of nosey neighbors; occasionally, however, a parent will single out their area for special praise just because the neighbors are not nosey. This concern with privacy may foretell difficulties for programs that attempt to get them together with parent groups. For the most part, the parents seem to be striving for a subtle modus vivendi which allows them to balance the need for privacy with the needs for occasional assistance and at least a modicum of sociability from those in the immediate area. There appear to be neighborhood differences in the success with which families can achieve such a balance.

Finally, the social character of a neighborhood is very much affected by its residential stability. The interviews suggest some of the connections between neighborhood stability and parents' perceptions of their safety and of the supports available from neighbors. In the three low-income areas, where personal safety is an issue and mobility is highest, several mothers connected their safety, their knowledge of neighbors, and their length of residence in the area. "I feel secure because I've lived in the Tallman-South area for so long -- sixteen years -- and believe people won't harm me or my family and won't let strangers harm us either," one mother reported. "But if I didn't know the people, I'd be scared because this part of town has a bad reputation. But, as I said, we feel safe. I'm close to a lot of people here and we trust each other." Unlike this woman, the majority of the residents of low-income areas are single mothers who move frequently. As single parents with the sole responsibility for child care, many could use informal neighborly assistance, but their high mobility gives them less time to establish relationships with neighbors who can help them to cope with a difficult situation and environment. The high rate of residential movement in the low-income areas may also affect the ease of establishing Project programs there.

A Holistic View

To this point what has emerged are somewhat isolated components relating to how parents perceive and evaluate their neighborhoods as socializing spaces. Now an attempt will be made to put these and other components together, in order to give a more dynamic and holistic sense of the social ecology of these neighborhoods. The term social ecology refers to the way families interact with an area and its people, and the ways in which their interactions are felt to foster or impede the development of parents and children. The interactive aspect of the social ecology needs to be underlined; parents both act and are acted upon in their efforts to work out a relationship with their surroundings that they feel will benefit themselves and their children. Their strategies for dealing with the environment in turn become part of the ecology.

With each neighborhood, one finds variations among parents' views of the area as a socializing space. However, the amount of variation between the three low-income and the seven moderate- and middle-income areas is one of the most striking results of the analysis. By and large, families in the low-income areas describe their neighborhoods as hostile, or, at best, neutral. Those in the more affluent areas describe their neighborhoods as neutral at worst, but, more frequently, as supportive for their children and their child-rearing efforts.

In the low-income areas, parents' concern about the safety of the neighborhood is accompanied by a set of worries about the negative influence of other children and adults in the environment. The parents worry about their children picking up bad habits and language, their early exposure to sex and violence, physical harm from drunks or gangs of teenagers, and the bad influence of other children who they feel are allowed to "run wild." They fear the effects of the children's premature exposure to the seamier side of the adult world in the neighborhood. Other children in the neighborhood are not seen as a resource but as a source of bad influence and corruption. As a result, the parents frequently restrict their children to the home and try to limit their access to other nearby adults and children. "Almost everybody here keeps their kids to themselves; they don't let their children play with other children, or at least they try to prevent it," one low-income mother reported. Consequently, she said, "It makes it hard for the kids to find something to do." One father living in LBJ echoed the views of many others when he said: "The one

thing I really dislike about the neighborhood is how some parents just let their kids run wild...I mean the kids around here have no discipline. The association with other kids is bad 'cause the kids around here are so bad, so I won't let him go outside by himself." The parents feel they have little privacy and little control over events, places, and people in the immediate environment, and that this has negative effects on their children. The stresses have a direct and an indirect impact on the child, directly through things such as curtailed activities and lack of play space or playmates, and indirectly through increased stress on the parents.

These stresses are accompanied by the lack of positive support from others; parents do not report that they can count on others in the area to keep an eye on the children outside or rescue them from harm. There is a sense, expressed by an LBJ mother, that "people don't care....They just don't care about anybody else." In sum, the description many of the parents in the low-income areas give is one of an antagonistic and uncaring environment in which they get little support for parenting.

The cumulative impact of these various neighborhood stresses and lack of support in the low-income areas seems to be withdrawal into the family to avoid harm from an environment felt to be mostly hostile. "I keep to myself," one mother said. "They don't bother me and I don't bother them." As a coping strategy, this is very much akin to Suttles's (1972) previously mentioned idea of defended neighborhoods. In these areas where defensible space and control are less, detachment may be an effort to exert greater control.

This coping strategy, while understandable, may carry with it a dilemma. To control an unsafe and unsupportive environment, parents narrow the social and physical range for themselves and their children, but this can impose burdens of its own. Withdrawal or the limitation of interaction can make it hard for parents and children to get away from each other, with possible negative effects for each. It may also create loneliness and isolation for both parents and children and cut them off from the stimulation and support the environment might offer. The children have the double problem of lonely parents and the lack of access to other people and activities.

In contrast to the parents in the low-income areas, those in the seven moderate- and middle-income neighborhoods describe their neighbors as friendly, helpful, skilled in getting along with others, and respectful of privacy. They report that their neighbors often become resources for emergencies and that they watch out for neighborhood children. "They're dependable," one mother said, "we really help each other in general. We keep an eye on each other's kids -- all my neighbors are that way." She and others described her area as "family-oriented" or as possessing a "family atmosphere." People reported feeling secure that if they needed help, it would be forthcoming from their neighbors. This offers a subtle kind of support to parents in the form of insurance against future need.

Few parents in these areas mentioned restricting their children's range of contacts in the neighborhood. Neighboring children and adults are seen as a source of stimulation and support, and as a result, the children seem more free to roam around and explore under the neighborhood's watchful eye. "I feel secure letting our kids have the run of the block," a Westcott-Thorndon father said. ". . .People throughout the neighborhood know my daughter and her sister and they keep an eye on them." He added that he and his wife "feel free to caution other children if they are doing something unsafe and I know other people do too." A single mother in Tipperary Hill explained that her neighbors look out for her and her sons. Therefore, her boys can play outside and she doesn't "feel that I

have to be looking out the window all the time." She adds, "People here really do care . . . and it's real." The parents in these areas trust others in their environment, for the most part, and therefore they do not live in constant worry about negative environmental influences. The benefits for parents in this are likely to be two-fold: children are relatively safe but not always underfoot, and the parent shares some of his or her child-watching and perhaps childrearing responsibilities with others. In these higher-income areas, the largely positive influence of the neighborhood ecology means that it becomes a background for childrearing. In the low-income areas, however, the negative aspects of the ecology put the effects of the neighborhood much more in the foreground of people's concerns.

Conclusion

This examination of the parents' perceptions of their neighborhoods has important limitations. We are in a position akin to the figure in the cave in Plato's Republic who watches the shadows pass by that hint at the nature of reality, and not reality itself. However, we can glean enough to suggest that the social ecology of the neighborhood affects a family's capacity to function as an effective childrearing system. It is time to move on in our analysis of neighborhoods and families. Some of the directions that could be pursued include the following: First, this chapter has suggested some specific ways in which the neighborhood ecology affects children's activities; these relationships need to be tested both ethnographically and statistically. Second, we need to aggregate and disaggregate the neighborhoods. By this I mean that we need to cluster neighborhoods into types according to social-ecological as well as socioeconomic principles. We also need to see how homogeneous the neighborhoods really are. Are there niches within them that contrast with the surrounding ecology? The effects of the neighborhood should not be examined only in isolation from other parts of the family's ecology. Access to the extended family, for example, or friends outside the neighborhood, might compensate for the lack of a supportive neighborhood ecology. Finally, we need to explore the consequences of the low-income families' lack of control over their neighborhoods' effects on their children and childrearing. How does this affect the parent-child relationship? Does this sense of a lack of control spill over to the children? Do the conditions of the neighborhood and the strategies these parents develop to handle the negative influence of neighbors encourage or discourage them from banding together to work for neighborhoods more supportive of family life?

Table 4.1

SELECTED CHARACTERISTICS OF PARENTS IN PROGRAM NEIGHBORHOODS

Neighborhood (Income/City or Suburban/Ethnicity)	Home Owners	Do Not Own Cars	Neighborhood Composition (%)			Marital Status (%)				Number of Households
			Ethnic White	Non-Ethnic White	Black	With Husband	Alone	With Partner	With Parents	
LBJ Low/City/Mixed	20	55	50	45	5	38	50	6	6	16
Lexington-E. Fayette Low/City/Black	0	55	6	0	94	36	43	0	21	14
Tallman-South Low/City/Black	20	60	16	8	76	41	41	18	0	17
Nedrow Mod/Sub/Non-Ethnic	80	5	4	92	4	66	7	7	20	15
Eastwood-North Mod/City/Ethnic	40	30	55	41	4	53	35	12	0	17
Liverpool Mid/Sub/Non-Ethnic	88	5	12	88	0	100	0	0	0	16
Tipperary Hill Mid/City/Ethnic	50	5	61	39	0	87	13	0	0	16
Schiller-Wadsworth Mid/City/Ethnic	75	10	83	17	0	88	0	6	6	16
Westcott-Thordon Mid/City/Mixed	80	12	36	56	8	60	26	7	7	15
Salt Springs Mid/City/Black	50	30	14	32	54	61	22	17	0	18

CHAPTER 5

SOCIAL TIES AND PARENT-CHILD OUTCOMES: THE NETWORKS OF SINGLE AND MARRIED MOTHERS

Moncrieff Cochran
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Introduction

Other papers in this collection have examined working status and residential neighborhood for their effects upon the perceptions of parents and the activities of the child (as reported by the mother). Both the neighborhood and the work place have been settings often targeted by policy-makers in Western, industrialized countries (though less often in the U.S.) for restructuring in ways thought to be advantageous to families with young children. In our further articulation of the ecological systems affecting families, we turn now to one that cannot be conceived of as a setting and has not been addressed systematically in public policy.

The personal social network consists of those relationships maintained by the parent with relatives, neighbors, workmates, and other friends, that are relatively enduring and are perceived by the parent as "making a difference." As such, the network may contain people from a variety of settings, and, through the kinship system, has a strong historical reference point. We have chosen for the purposes of the Ecology Project to define personal networks and informal support systems as analogous. In so doing, we are seeking to bring conceptual and operational clarity to the area of inquiry called social supports (House, 1979; Wellman, 1981), while at the same time maintaining contact with developments in family sociology (Noble, 1973). Others share with us an interest in applying the network perspective to the broad concept of social support (Stack, 1974; Wellman, 1981; Gottlieb, 1981; Belle, 1982; Lin, 1979). This interest is central to the aims of the Ecology Project, which defined its original purpose as the study of "the capacity (of urban American environments) to serve as support systems to parents and other adults directly involved in the care, upbringing, and education of children" (Bronfenbrenner and Cochran, 1976). In drawing the analogy between personal networks and social supports, we are careful to heed the warnings of Wellman (1981), Belle (1982), and others who emphasize that to assume all network ties are supportive is to seriously oversimplify the nature of both networks and ties.

The particular interest of our social networks team is in the social and material resources provided by network members to parents, as those provisions might affect parents' feelings about themselves and their children, and the activities engaged in by those children. From our reviews of the social networks and social supports literatures, it has become apparent that as areas of inquiry, these conceptual domains have increased very rapidly in popularity during the past decade. In the rush to embrace an intuitively appealing set of ideas, what has been accomplished in the way of theory-building and empirical verification is limited in a number of ways.

First, most measures of social support have been relatively global and undifferentiated, thus contributing little to our understanding of support as structure or process, even when significant links between these global indices and various outcomes are identified. Utilization of data generated within the network framework, on the other hand, permits quite a broad range of differentiations: in membership role, between kin and non-kin; in content, among material, informational, and emotional assistance; in intensity, between more and less multiplex or multistranded relationships. (See Table 5.1 for variable definitions.)

Second, even among those family researchers who have embraced network concepts as a useful way of operationalizing social support, there has been the tendency to study samples very limited in size and socio-structural composition. This small scale approach, while understandable from a methodological standpoint (the mapping of networks being an arduous process), has serious theoretical and policy-related implications. For instance, when samples are limited to men and women at the bottom of the socio- economic ladder (Stack, 1974; Belle, 1982), it is tempting to conclude that particular patterns of network composition and utilization are a function of individual motivations and personality characteristics, when in fact differential access to socioeconomic resources (income, education) has not been ruled out as a factor. And researchers studying the networks of "single" mothers without comparing them with the networks of their married counterparts (McLanahan, 1981) may attribute as peculiar to singles some network characteristics that are equally common to married women.

The third limitation apparent from a review of the current literature is that there has been very little attention paid to the effects of personal networks on the childrearing process or on child development. While we are seeing an increasing number of empirical studies involving parents' networks (Stack, 1974; Abernathy, 1973; Teitjen, 1978; McAdoo, 1981; McLanahan, 1981; Crockenberg, 1981; Belle, 1982; Brassard, 1982), only two researchers (Crockenberg and Brassard) report findings involving parent-child interaction or child outcomes.

The conceptual model within which we have collected and are now analyzing our network data permits us to address systematically each of the three limitations just identified (see Figure 1). Included in the model are social-structural variables (income, education, occupation), a carefully differentiated set of network variables, and two classes of individual and family-related variables (parental perceptions and parent-child activities, as reported by mothers). In addition, the characteristics of the study sample permit consideration of the relationship among these variables for mothers in a variety of circumstances: from ethnic and non-ethnic backgrounds, married and single, and working and not working outside the home.

Methods

The Social Networks Interview

The details of the social networks interview were summarized in Chapter 2. Data gathered with the interview can be arranged to create the set of topological features that are depicted in Figure 2. The reader can see that the total network contains within it three regions. The functional circle includes all of the people identified by the parent as participating with her/him in one or more designated exchanges or activities. The primary circle is made up of those in the total network who are identified by the parent as most important to him or her. Individuals listed as members of the total network who did not meet the criteria for either the functional or the primary circle make up the periphery.

Coding and Variable Construction

Data on individual network members were also aggregated by respondent (mother or father). A number of respondent-level variables were created, some of which were

combined further into network indices. This process and the conceptual framework guiding it are described in some detail in a recent final report to the National Institute of Education (Cochran et al., 1981). A subset of the network variables available to us has been used in the analyses reported in this chapter (Table 5.1).

The mother-perception and mother-child activity variables were created from data gathered with two other interviews, the Stresses and Supports Interview and the Child-Caregiver Activities Interview. Descriptions of these interviews and the variables derived from them can be found in Chapter 2 and Table 5.1.

Data Analysis Techniques

The research guiding these baseline investigations of social network and parental perception data was conducted within an analysis of covariance framework. Adopting this analytic strategy allowed us to examine direct effects (network characteristics on mother-child outcomes; socioeconomic status on access to social ties) both for the overall samples of single and married mothers and separately for key subgroups within each sample. As illustrated in Chapter 2, nine subgroups were defined by the intersections of "mother's work status" with the "joint ethnicity" of the husband-wife dyad (three levels of work status and three levels of joint ethnicity).

Choosing an analytic framework capable of examining both the overall and separate effects of networks on maternal perceptions is critical for testing the basic premise of ecological research: that is, that the "main effects" are themselves likely to be seen in interactions--interactions in this case between the processes of the social environment and the context in which those processes take place.

Two types of statistics resulting from these analyses of covariance procedures will be used to evaluate the predictive strength and direction of the specific interrelationships under investigation. The overall relationships will be reported both in terms of the R^2 statistic (or the proportion of total variance in the outcome variable accounted for by the set of predictors) and in terms of the probability levels associated with the estimated overall regressions of the dependent variable on key predictors, adjusting for the effects of other control variables. The comparative strengths of the separate effects of networks on maternal perceptions will also be evaluated in terms of the probability level, in this case associated with the regression coefficients calculated by smallest subclass. The absolute magnitudes of estimated regression coefficients are not reported because all estimation was in terms of unstandardized coefficients, which are not directly interpretable due to differences in the underlying scale of measurement.

Research Questions

Because so little previous research has explored relationships between personal networks and either social-structural factors or childrearing patterns and child outcomes, we consider ourselves engaged in the process of generating rather than testing hypotheses. However, a number of informed hunches have guided the design of these analyses. For instance, we make a major distinction between the relatives and the non-relatives in parents' networks because kinship and friendship patterns have long been distinguished by sociologists and anthropologists. It is reasonable to expect support from relatives and

support from friends to have different meanings for parents. Relatives tend often to be tied to parents in intense and multi-faceted ways, producing relationships with a strong affective component. Non-relatives are more weakly tied to the parent, and so might be expected to serve more instrumental needs (Lin, 1979). If childrearing is considered a primarily affective undertaking, then one might expect support from kin to be more closely tied to adults' perceptions of themselves as parents and of their children, and more related to levels of joint mother-child activity, than support from non-kin. However, certain circumstances (like single parenthood, or full-time work outside the home, or even strong ethnic background) could so alter the relationships between mothers and their relatives that non-kin would emerge as relatively more salient for the parent- related perceptions and behaviors of those women. Thus, the importance of an approach that distinguishes among mothers in these various circumstances, and treats kin-folk and non-kin separately, is underscored.

Results

In presenting results, we will move from left to right in the model shown in Figure 1. We begin with possible direct relationships among mothers' social-structural positions and the characteristics of their networks. Direct links between social structure and parental perceptions/parent-child activities are then explored. Finally, we shift to a consideration of links between the structure and content of mothers' networks and mothers' perceptions of their activities with the child, with appropriate statistical adjustments to hold constant the effects of mothers' educations and family incomes. The data for these analyses were provided by the 199 white mothers in our sample. Married and single mothers were considered separately, and so findings are presented first for the married, then for the single, group.

Family Income, Mother's Education, and Network Characteristics

First we examine the separate effects of education and income on each of our key network variables. The most obvious generalization that can be made from these analyses is that education is much more strongly related to both the structure and content of these mothers' networks than is family income. This overall pattern is further differentiated by the kin and non-kin portions of the total network. Mother's education has a significant overall positive effect for the size of both kin and non-kin membership, but the magnitude of the relationship is considerably stronger for non-kin than for kin. ($R^2 = .34$; $p = .001$ vs $R^2 = .21$; $p = .05$). This greater impact on non-kin is also reflected in the number of network members reported as providing specific exchanges (babysitting, advice, and emotional support).

It is not surprising to us that the mother's educational level is much more strongly associated with the non-kin than the kin portion of her personal network. After all, mothers have more discretion over their non-kin ties than they do with ties to relatives; relatives are more "built-in" to networks regardless of what the mother contributes to the situation. Given this reality, we were somewhat surprised to find the weaker, but still significant, relationship between educational level and the size of the kin network. Looking more deeply into the kin network for an explanation, we found that the size increase with higher educational levels comes for "extended" but not for "immediate" kin. Again this makes sense to us, because extended kin are in many ways more "like" non-kin than they are like relatives, as regards the obligatory aspects of the relationships.

We are still in the process of examining in our sample of single parents the relationships between social-structural factors and network characteristics. We expect those analyses to yield fewer significant results, because there is less variation in the distribution of "human capital" resources among single mothers.

SES Variables, Mother-Perceptions, and Joint Mother-Child Activity

Shifting now to possible direct relationships between measures of socio- structural position and our set of parent and child outcomes, we included family income and mother's education as control variables in a series of regression equations (with measures of mother perceptions and reported mother-child activity as outcomes). This analytic step was necessary in order to determine the separate effects of social structure on the parent and child variables before bringing the (intervening) network variables into the picture. Two significant relationships were identified in this way for married mothers, both at the level of mother-perceptions. Family income was linked with the perceptions of spouse as parent, so that, as income increased, the mothers' perceptions of their husbands became more positive ($R^2 = .27$; $p = .05$). It turns out that mothers' views of their spouses showed no other overall relationships with any of the network variables included in the analyses to be reported below, so we concluded that the impact of family income on perception of the spouse is a fairly direct one.

With increases in the amount of schooling completed by the mothers, came a more positive view of their children ($R^2 = .33$; $p = .05$). As we shall see later on, however, this relationship is complicated by the introduction of network variables into the analyses.

For single mothers, relationships with income and education were again limited to mother-perceptions. Level of education had a significantly positive effect upon perceptions of both self as parent and child. Family income was not linked to mother's perception of her child, but in the case of perception of self as parent there was an interesting reversal in the case of single mothers who were not working outside the home. As family income increased, the perception of self as parent became more negative. In order to understand the relationship better, we are currently engaged in a qualitative analysis of what these particular women report as sources of income.

Personal Networks, Mother-Perceptions, and Mother-Child Activities

The distinctions between married and single mothers, and between the kin and non-kin portions of their personal networks, are now used to organize the presentation of additional results. Again we begin with married mothers, presenting findings associated first with their personal perceptions and then with parent-child activities. Attention then shifts to single mothers.

The perceptions and activities of married mothers--Factors in the statistical design used to analyze the data from married mothers included three levels of both joint ethnicity and working status (see Figure 1 and Table 5.1 for definitions). The two major classes of network variables used were total size of the kin and non-kin networks and the content of resources provided to the mother by her relatives or non-relatives. This exchange content was further differentiated into emotional and instrumental (babysitting, child-related advice) components, and also included a measure of multi-strandedness (see Table 5.1).

The two mother-perception categories of interest are defined in Table 5.1*, as are the network variables. Also included in the regression equations were measures of mother's social-structural position, where appropriate. Although we began this sequence of analyses by introducing only one network variable at a time, our more ambitious goal was to capture the more multi-dimensional nature of networks. We moved toward this goal by simultaneously including a measure of network content with one of structure.

The mother's perception of her child--The first thing that the reader can see in the table is that there is a highly significant positive relationship between the number of kin included in the network and the mother's view of her child ($R^2 = .44$; $p = .01$). It is well to remember, however, that an equally strong link between mother's level of education and her positive view of the child has already been reported. When both variables were included in the analysis, size of kin network continued to show significant effects independent of educational level. It appears, then, that the positive impact of more education on the mother's view of her child may be mediated by an increase in the number of relatives participating in her network.

When the kin size variable was entered into the regression equations together with each of the network content indices, the number of kin providing childrearing advice also showed a significant positive relationship with the mother's view of her child (overall $R^2 = .46$; $p = .05$ for advice).

When we examined the same basic sets of interrelationships for the non-kin variables, none of them showed a significant relationship with mother's perception of the child. In those analyses, the level of education of the mother was the only measure that could be linked to the perception variable.

The mother's perception of herself as a parent--Here we find that only one of the kin network variables, the ratio of emotional support to total number of kin in the network, showed a significant effect ($R^2 = .22$; $p = .01$). In the case of the nonkin network, however, the relationships were stronger, although still heavily affective in content ($R^2 = .27$; $p = .005$). The emotional-support ratio was positively linked to mothers' self-perceptions, as was the number of non-kin in the network with whom the mother shared two or more exchanges ($R^2 = .19$; $p = .05$). But when both emotional support and multi-strandedness were included in the regression equation simultaneously, it was the emotional-support variables that emerged with an independent effect approaching significance ($R^2 = .32$; $p = .06$). This finding suggests that it is the emotionally supportive aspect of multi-functionality that has significance for how the mother perceives herself as a parent.

Mother-child activities--The outcome variable of interest here is called joint mother-child activity. This variable consists of all the activities engaged in by the mother and child together, as reported by the mother in her description of a week day with the child.

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* The reader will remember that perception by mother of spouse was strongly related to family income. It bore no relationship to any of the network variables, and so is not discussed further in the results section.

Again our analyses proceeded hierarchically, beginning with the kin size variable plus SES covariates, and proceeding to equations where total kin size was combined with emotional support or exchange multi-strandedness, or both. Our findings indicated, first, that number of kin alone bears no significant relationship to amount of joint mother-child activity. A significant positive effect is produced, however, when the total kin size is combined with either number of kin providing emotional support ($R^2 = .37$; $p = .005$) or number serving three or more functions ($R^2 = .34$; $p = .005$). We know from analyses conducted earlier (Cochran et al., 1981) that these two measures of network intensity are highly interrelated, and so to examine independent effects, we included both in a regression equation, along with total number of kin and the appropriate SES covariates. Our findings indicate that this time it is multi-strandedness that continues to have an independent effect when the two variables are adjusted for each other. Thus we concluded that there is something beyond the emotionally supportive component of intense relationships with relatives that contributes to an increase in the number of activities a mother participates in jointly with her child.

The only network variable involving non-kin which proved to be related to joint mother-child activity was the number of those non-relatives reported as providing babysitting support. This effect, which was present in the single-variable model, was further strengthened when total size of the non-kin network was added to the equation ($R^2 = .33$; $p = .05$). This picture for non-kin contrasts with that presented earlier for relatives, where it was the measures of intensity of involvement (emotional support and multistrandedness) that increased with higher levels of joint mother-child activity.

Because we carried these analyses to the level of the smallest subgroup of mothers wherever earlier comparisons indicated that effects were not evenly distributed across the sample (homogeneity of regression), it is possible to say something about which of the married mothers were most affected by the network resources they report as available to them. The general pattern is for mothers working outside the home, both full- and part-time, to be most sensitive to the greater or lesser availability of and support from network members. This pattern suggests that as the demands upon a married mother's time and energy increase, she becomes increasingly likely to look outside the immediate family for assistance, and so demonstrates a greater sensitivity to the availability of such social resources.

The Networks of Married Mothers: A Summary--By stepping back now from these rather dense data, it is possible to see some patterns beginning to emerge. Relatives stand out as playing a key role in how married mothers perceive their children. These relationships are statistically powerful. They stem from the overall number of relatives included in the mother's network, as well as the child-related advice provided by those people.

With the mother's perception of herself, on the other hand, it appears to be unrelated adults who make the strongest positive contribution. This support is largely emotional in content, and is complemented by similar kinds of support from kin.

In the case of joint mother-child activities, it is the educational level of the mother that determines most directly the amount of such collaboration. Beyond this, both relatives and non-relatives play a part, kin in the affective domain and non-kin more instrumentally (babysitting).

Our data involving the networks of married mothers, when summarized in this fashion, do not support the notion that relatives provide primarily emotional support, and friends

primarily instrumental. While such a pattern may hold at the level of mother-child activity, for mothers' perceptions of themselves and their children the reverse is true: relatives contribute through advice and sheer numbers, while friends and co-workers provide support along the emotional dimension.

The Networks of Single Mothers

Two goals have guided our more recent attempts to understand the personal networks of the single mothers in our sample, as these networks relate both to social structure and to parent and child outcomes. First, we wanted to differentiate those women who were truly single from those involved with a male partner in a stable relationship. Second, we wished to compare singles living with and without partners to married mothers, to see if the differences between being "coupled" and single were greater than the differences between being "coupled" and legally married. Highlights of our initial investigations into the relationships between network characteristics and mother-child outcomes for single mothers are provided in the paragraphs that follow. Because our focus is not on the entire model, but only on the single mothers within it, the test statistic pertaining to the overall model (R^2) is not presented below.

As with the earlier analyses, we began our comparisons by looking at the possible effects of the kin and non-kin network size variables on mother-perceptions and joint activities. These size variables had no impact on the perceptions of our truly single mothers, but there is strong evidence that increases in the numbers of kin and non-kin were associated with more positive views of the child for mothers living with partners ($p = .001$ for both kin and non-kin).

Turning to the content of network exchanges considered in combination with the size variables, the picture becomes considerably more complicated. In the case of exchanges with kin, babysitting was related to more positive feelings about the child for single mothers without partners who work outside the home ($p = .05$). But as the percent of available relatives providing emotional support increased, significantly fewer positive feelings were reported by truly single mothers, specifically those working outside the home ($p = .05$).

With non-kin, the effects of the network involved both babysitting and advice, and were negative. For mothers living with partners, it is non-kin who provide babysitting that have such a negative impact on perceptions of the child ($p = .05$); while the negative effect of advice from non-kin is restricted to truly single mothers who work ($p = .05$).

Looking at these mothers' perceptions of themselves as parents, the picture is in sharp contrast to what we have just described for perceptions of the child. Both emotional and instrumental assistance from non-kin have beneficial effects for mothers living alone, especially if they are not working ($p = .01$). These effects do not extend to the mothers living with partners. Again, however, when we shift to instrumental assistance from kin, the more negative picture is evident, this time related to the provision of advice about childrearing. Mothers who are truly single feel less positive about themselves as parents when kin are more involved in provision of advice, particularly when they are not working outside the home
($p = .001$).

What comes across most strongly from this first comparative examination of how the networks of our single mothers affect their perceptions is evidence of cost, as well as

benefit, in these relationships. This is not itself a new finding (Belle, 1982), but its significance is enhanced by comparison with what appear to be largely beneficial (or at worst neutral) exchanges in the networks of married mothers. And the push/pull of costs and benefits is not restricted to single mothers living alone; it extends also to those with partners, although not always in the same fashion. Thus our initial impression is that women living with male partners cannot be understood in network terms simply by lumping them with either truly single women or those who are legally married. A real understanding of why unmarried mothers are especially vulnerable to the costs of maintaining instrumental and emotional ties with relatives and friends requires a fine-grained, qualitative analysis of these data; this is an analysis which we have underway and will be reporting on later in 1982. We are concentrating, in the qualitative undertaking, upon what single mothers actually have to say about their network involvements in order to gain an understanding of the demands made by these relationships, which might transfer into lowered self-regard or more negative views of the child.

We began this presentation arguing that the understanding of which environmental forces assist parents in the rearing of their children would be enhanced by an approach that 1) was attuned to the social-structural realities of American life, 2) compared the networks of mothers from a range of ecological niches, and 3) utilized a differentiated framework for understanding personal social networks. We feel that such an approach is bearing fruit. Clearly the networks of these mothers are affected by their social positions within our society, especially as those positions are reflected in their educational attainments. And yet, there is a good deal more to the picture than simple social structure; networks seem to affect parental perceptions and parent-child activities in ways that extend beyond the effects of education and income. This picture is complicated by the inclusion of single parents, who are vulnerable to some aspects of their networks in ways we need to understand much better. Those further understandings will emerge from the work currently under way, and from longitudinal comparisons made possible by follow-up data that we are currently in the process of collecting.

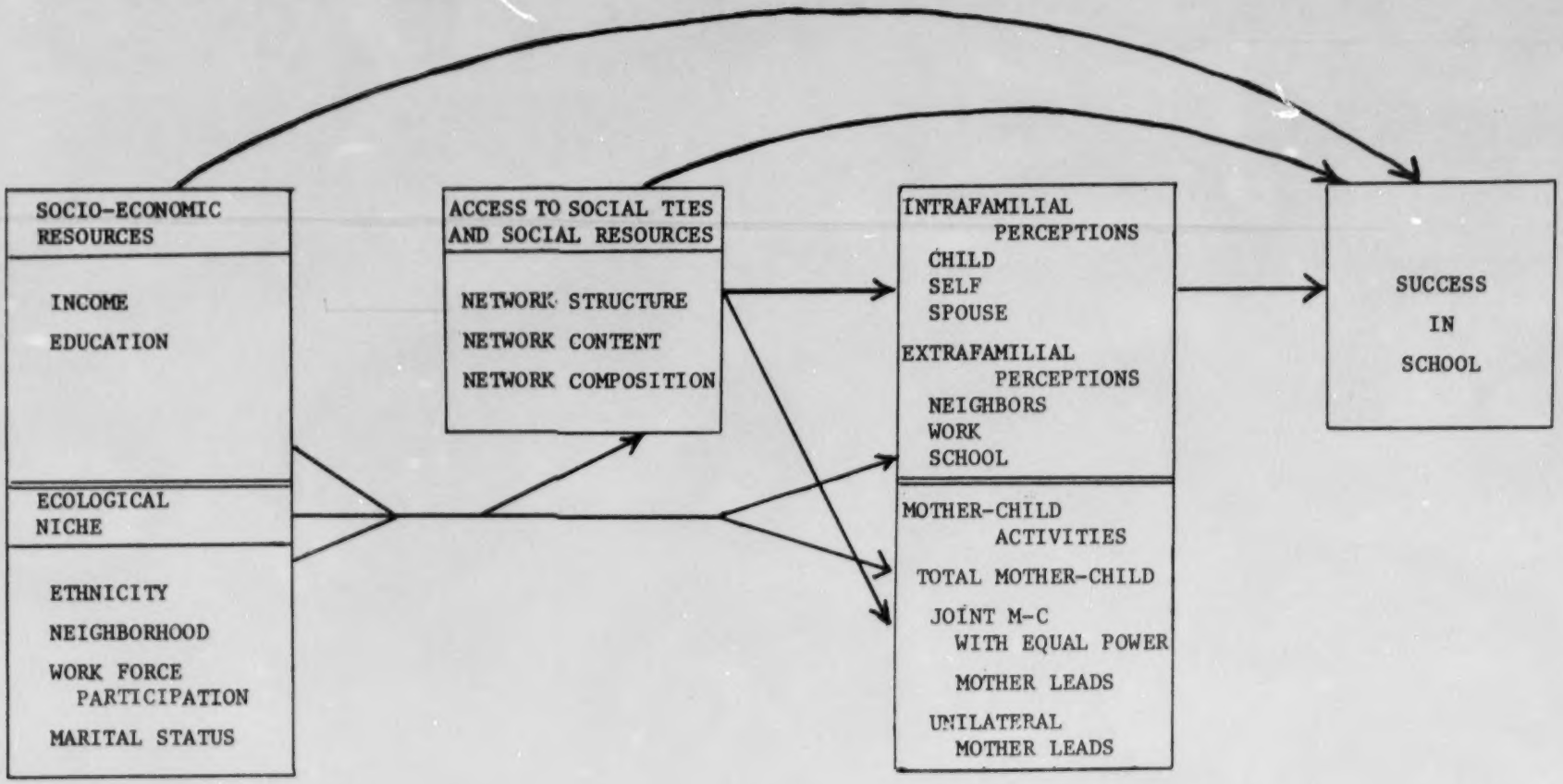

FIGURE 1

THE COMPARATIVE ECOLOGY OF HUMAN DEVELOPMENT PROJECT: CONCEPTUAL SCHEMA

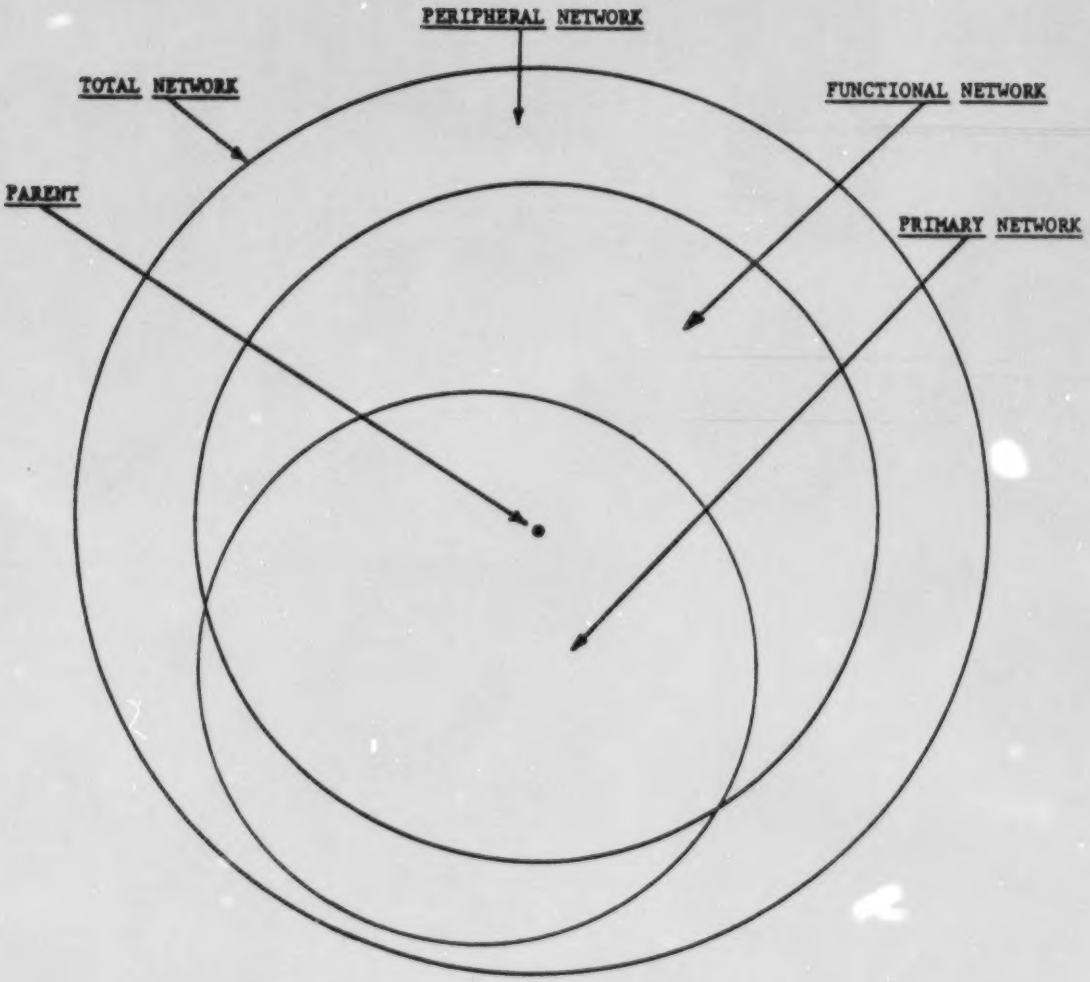

FIGURE 2

MAJOR DIVISIONS OF A PARENT'S NETWORK

TABLE 5.1

DESCRIPTION OF VARIABLES INCLUDED IN SOCIAL NETWORK ANALYSIS

Access to Socio-Economic Resources

MOTHER'S EDUCATION
Mother's report of number of years of education completed.

FAMILY INCOME
Total family income per year, in dollars, as estimated by respondent.

Ecological Niches

WORK STATUS
1 = not working.
2 = part-time work, 4-35 hours per week.
3 = full-time work, greater than 35 hrs/week.

JOINT ETHNICITY
Assignment to levels of this variable was based on: self-identification as "ethnic;" endogamy; some religion; language use, generational entrance status; and national origin (as a target group in this population).
1 = non-ethnic.
2 = weak-ethnic.
3 = strong or mixed-strong ethnic.

FAMILY STRUCTURE
Three levels were included in the analyses
- living alone (without an adult partner);
- living with male partner (unmarried);
- living with husband (legally married).

A small subgroup of mothers who were living with their parents were excluded from these comparisons.

Access to Social Ties and Social Resources

(Each of the following variables has been constructed for both the kin and non-kin sectors of the network. For brevity, only the kin-linked variables are listed. The non-kin variables are constructed in exactly analogous fashion.)

Network Structure Variables:

NETWORK SIZE, KIN
Number of network contacts who are kin.

MULTIPLEXITY OF TIES, INCIDENCE IN KIN SECTOR
The tie between respondent and network member is multiplex if the relationship is reported to involve three or more types of exchange (out of five types of exchange defined: child-related, practical, financial, emotional, work-related). Incidence of kin multiplexity is a count, for each respondent, of the number of kin with multiplex ties to the respondent.

RATIO OF MULTIPLEXITY INCIDENCE TO AVAILABILITY, KIN
The number of multiplex ties to kin, divided by the total number of kin in the network.

Network Content Variables:

BABYSITTING, KIN
The number of kin who are reported used for babysitting.

CHILD-ADVICE, KIN
The number of kin who are reported to be used for advice on childrearing.

RATIO OF BABYSITTING ASSISTANCE TO NETWORK SIZE, KIN
The number of kin who provide babysitting help, divided by the total number of kin in the network.

RATIO OF CHILD-ADVICE TO NETWORK SIZE, KIN
Childrearing advice, divided by the total number of kin in network.

EMOTIONAL ASSISTANCE UTILIZED, KIN
The number of kin utilized for emotional support.

RATIO OF EMOTIONAL ASSISTANCE TO AVAILABILITY, KIN
The number of kin utilized for emotional support, divided by the total kin in the network.

Intrafamilial Perceptions

MOTHER'S PERCEPTION OF THE CHILD*
Sum of all the positive descriptions made by the mother about the target child.

MOTHER'S PERCEPTION OF SELF AS A PARENT*
Sum of all the positive statements the mother makes about herself in relation to the parent role.

MOTHER'S PERCEPTION OF SPOUSE AS A PARENT*
Sum of all the positive statements the mother makes about her spouse, in his role as a parent.

MOTHER'S DESCRIPTION OF JOINT ACTIVITIES
Sum of all the joint activities the mother reports engaging in with the target child, irrespective of the balence of power reported. "Joint activities" refers to those activities that are commonly engaged in by both mother and child together, as gauged by the mother's report (in structured interview) of a randomly selected day.

* These sums are derived from all applicable responses in a structured interview of stresses and supports in the respondent's life.

CHAPTER 6

THE ECOLOGY OF HUMAN DEVELOPMENT FOR BLACK AND WHITE CHILDREN: IMPLICATIONS FOR PREDICTING RACIAL PREFERENCE PATTERNS

William E. Cross, Jr.

In studies of identity development in Black and white children involving the assessment of racial preferences, a same-race preference pattern has been defined, implicitly or explicitly, as the expected and appropriate developmental outcome (Banks, 1976; and Clark and Clark, 1939). That is to say, white children were expected to show a preference for white, Black children a preference for Black, and deviations from a mono-racial pattern have been attributed to the possible presence of psychological problems, including self-hatred.

Literature reviews (Butler, 1976; Cross, 1981), even those critical of the use of racial preference measures (Baldwin, 1979; Gordon, 1977), have reported that from the initial study to the present, white children have repeatedly evidenced a (white) mono-racial preference, while for Black children two trends have been apparent. A preference in Blacks for the opposite race or a "self-hatred" pattern was thought to be a repeated finding in racial preference studies conducted between 1939 and the onset of the Black Power Phase (1967-1972) of the contemporary Black Social Movement (1954-1972). A second trend, the tendency of Black children to show a (Black) mono-racial pattern, was said to be the primary finding in the replication of racial preference studies conducted during and since the Black Power period, i.e., evidence of (positive) identity change in Blacks. In a stunning and controversial finding, Banks (1976) reported that while it is true that white children generally produce (white) mono-racial preference patterns, Black children have seldom demonstrated either a Black or white mono-racial pattern. Instead, Black children, whether the focus is on studies of the past or present, have typically produced "split" or "chance" patterns. Going a step further, Cross (1981, 1981a) has noted that even in those instances where an experiment has produced either a white or Black mono-racial preference pattern in Blacks, Black mono-racial patterns when re-examined as proportions, are not as categorical as white preference patterns. In other words, the typical white preference set when expressed as the portion of white to Black choices, shows whites selecting white symbols over 90% of the time. On the other hand, Black patterns have typically fallen within those expected by chance (a 50-50 split), and even those studies showing non-chance (i.e., statistically significant) patterns found a 70% white/30% Black split in the past and 70% Black/30% white more recently. In effect, the "split" pattern for Black subjects and the categorical same-race preference set for white subjects have been commonplace outcomes of racial preference experiments. It has usually been the case that split patterns in Blacks have been interpreted in negative terms, and positive personality or self-concept attributes have been attributed to the (white) mono-racial preference in white children. Given the frequency with which they have been introduced in other social scientific studies of Black life, it may come as a surprise to the reader that seldom have concepts of bi-cultural or mono-cultural competence been applied to explain the "split" and mono-racial patterns associated with racial preference studies.

The purpose of the current investigation is to take a step "backwards," so to speak, and argue that the more appropriate point of departure in studies of racial identity development is not with child outcomes, but with an empirical analysis of the way in which the world is being depicted to the child. More specifically, in the Ecology Project we have sought an answer to the question: What are the racial/cultural implications of the way in which the world is being depicted and presented to children 2½-3½ years of age? The people making the presentation and a content analysis of commonplace adult-child activities are examined. In exploring the social network in which the child is immersed, and the

racial /cultural messages evident in the child's everyday experiences, we will be guided by the following hypotheses:

Hypothesis I: The social networks of mothers with young children tend to be racially homogeneous; consequently, if the target child is white, his world is being presented by whites and if the child is Black, the world is being interpreted by Blacks.

Hypothesis II: Content analysis of commonplace activities and experiences of young children ages 2½ through 3½ will reveal that Black mothers depict the world as bi-racial and thus appear to be advocating bi-cultural competence in their children, and white mothers frame the world with mono-racial (white) experiences and appear to be stressing the development of a mono- cultural perspective in their children.

Sample

This particular investigation used data from all the Afro-American families and a subsample of the white families which facilitated the distiction between white-ethnic families (families from ethnic neighborhoods whose cultural origin was Irish or eastern European and whose religious preference was Catholic) and white-non-ethnic families (white Anglo-Saxon Protestants whose cultural heritage was Western Europe).

The focal child was generally between the ages of 2 3/4 and 3 1/2 years of age, and the respondent was generally the target child's mother, although in a few instances, a grandparent or other relative was interviewed when the mother was not available. Table 6.1 shows certain characteristics of the sample such as family structure, family income, per capita income, mother's education, mother's age, and number of children in the family. There is a confounding of income status and family structure in that, typically, single-parent families were of low socioeconomic status (SES) while two-parent households were of working class to middle-income status.

Methods and Procedures

The data were collected during interviews conducted with the mothers at their homes. Mothers and interviewers were matched for race. This study is based on variables associated with two interviews: The Social Network Interview and the Child-Caregiver-Activities Interview.

Social Network Interview

The intent of the SNI was to collect detailed information on all or most of the people who, as perceived by the respondent, made a difference in her life. A broad-based list of names, including workmates, neighbors, relatives, friends, and contacts associated with certain agencies, groups, or religious institutions, was generated first, and this defined the person's Total Network (TN). Persons from the Total Network who were also associated with certain circumscribed supportive activities and exchanges constituted the respondent's Functional Network (FN). Finally, the respondents also indicated who the most important

people were in their lives, and these were listed as the Primary Network (PN). Each person named was called a "contact;" consequently, our SN corpus is unique in that the raw data files can be used to construct a large array of variables at the individual contact level. For the current study, we were interested in the size dimensions of the total, functional, and primary network. In addition, we wanted to concentrate on the number of opposite-race contacts in a person's network; i.e., if the mother was white, how many Black people did she include in her network; and vice versa when the mother was Black.

Child-Caregiver Activities Interview -- Identity Questions

Another interview asked the mother to summarize the events and activities of the last 24 hours, focusing especially on the target child and herself (interviews were scheduled so that the day of concern was always a weekday). The last part of this interview was a section that included 27 questions on commonplace activities carried out by the mother or another member of the famiy with the target child. For example, she was asked to describe the stories told or read to the child, the types of magazines the child is allowed to see and play with, the type of radio music or records played when the child is about, the history behind the child's name and nickname, the types of events (movies, plays, church programs) recently attended with the target child, what is considered before a toy is purchased for the child, the child's favorite T.V. shows, and the things emphasized in everyday conversations with the child. Near the end of the interview, the interviewer explored the child's play area or room and shifted attention to a general discussion of children's dolls and/or human play figures. This generally led to a display of such items, and the interviewer recorded, in as unobtrusive a manner as possible, the number of Black and white dolls/human figures.

This part of the interview elicited a large number of commonplace child-related activities, stories, events, etc. These items were subjected to content analysis to determine the extent to which Black people, Black culture, or Black symbols were evident. If Black material was not in evidence, a unit was coded "general American." A set of codes was devised, three coders were trained, and the interviews were analyzed. Coding took place over a three-week period, and a coder reliability check was performed during the first and second week. The inter-rater reliability range the first week was from .75 to a high of .97, with the average reliability for all three coders being .84. The second check revealed about the same range and an average reliability figure of .85. This process resulted in our being able to look at 1) the total number of items or examples elicited per subject for each of 22 of the original 27 items (for the cross-racial comparisons, items that were likely to occur only in Black's homes were excluded); 2) the mean proportion of coded units per subject that had Black content; 3) the mean proportion of total units per subjects coded white American; and 4) an average "Black culture" score which was calculated in the following manner. If any one in the series of examples cited in response to a question was coded Black, a score of one was recorded for that question; zero was scored when none of the examples was coded Black. This was repeated for each of the 22 questions; consequently, the scores could range from 0 to 22. Finally, for the total number of dolls recorded per home, the proportion of Black and white dolls was calculated.

Results

The data were analyzed in an analysis of variance, with ethnicity (Black; Ethnic-White; and Non-Ethnic-White), family structure (single- and two-parent), and sex of child as classification factors.

Size of Black & White Social Networks

We are operating under the assumption that the people who make up the mother's social network also constitute the key people in the child's life, especially when children are quite young and thus closely attached to the mother's world. While external child care arrangements could have introduced another dimension to the equation, as it turned out, few of our mothers used external services; most who needed child care were leaving their children with relatives. Before turning to the racial makeup of the networks, we begin our analysis by looking at the size factor.

While it is a side issue, we note that several theoreticians on Black life have suggested that Black families are more "people-oriented;" consequently, perhaps Black children spend more time with more people during a typical day then do white children. In a sense, both an intensity (more time) and density (more people) quality have been suggested. The intensity speculation cannot be addressed here but density can. The 3 x 2 x 2 analysis of variance was applied to the three size variables (Total, Functional, and Primary Network) for the mothers from Black, ethnic-white, and white-non-ethnic homes. Table 6.2 shows the mean size values for the ethnicity factor. In terms of size, the rank ordering of the three groups was the same across each level of the network construct; white-ethnics have the largest, white-non-ethnics the second largest, and Blacks the smallest networks. The size of the white-ethnic mother's network was significantly larger than that of the Black counterpart network, but not the white-non-ethnic for the total ($p=.04$) and functional ($p=.004$) levels.

One of the first explanations to emerge for the difference in size between Black and white networks involved speculations about the dynamics of racism. The city in which the study was conducted was predominantly white; consequently, a white person would have many more options for developing friendships and associations outside of their kinship circle than would Blacks. Blacks, in these same circumstances, are less likely to be received by whites as a potential friend because of their race; therefore, Black social networks should be smaller because they have fewer "non-relative" contacts. It did not seem logical that racism would also reduce the kin dimension; thus, it was predicted that the difference in size would disappear in a re-analysis that excluded non-kin or "others" from the analysis. Table 6.3 shows the means that resulted from the re-analysis, and the speculation was given partial support. At the total and primary levels, the sizes of the networks for Black and non-ethnic-white mothers were practically identical. Though not statistically significant, the white-ethnic mothers tended to have the largest (kin-related) networks across all three tiers of our network construct.

Opposite-Race Contacts

One way in which a child may come to know that the world consists of both Black and white people is for a mother to have opposite race contacts in her social network. Informal discussions with the coders preparing the social network information for data processing

revealed the impression that only mothers involved in mixed-race relationships had heavy opposite-race involvement in their networks. Since mothers of mixed relationships were not included in our original design for this analysis, we decided to look at the entire sample, matching mothers and target child by race, and thus produce three groups of matched pairs: 1) mother and child both Black; 2) mother and child both white; and 3) mother white, child Black. Race data currently exist at the levels of the functional and primary network; thus, the total network level is excluded from the analysis. Table 6.4 shows the proportion of opposite-race contacts in the functional and primary network for mothers in Black, white, and racially mixed single- and two-parent households. Frankly speaking, the results showed a community more racially segregated than we had dared to imagine; it is no longer difficult to understand why the coders had developed their impression about mothers in mixed-race relationships because such households had a significant number of opposite-race contacts while the other households had very few indeed.

It was obvious that the absolute number of opposite race contacts was abysmally small, so we decided to approach the data once more but from a slightly more timid perspective: how many mothers had at least one opposite race contact in their network, especially at the functional level? (Note that primary networks tend to be kin-dominated.) Table 6.5 shows the frequencies and proportions for the at least one vs. none breakdown. The results are very interesting. For Black households at the functional network, an SES dimension seems to be operating, in that single-parent (low-income) mothers are less likely to have at least one white contact than are two-parent (middle-income) homes. This is not the case with the white mothers; if anything, increasing income status has the reverse effect.* Although the sample was very small (n = 9), we note the dramatic effect of mixed racial mother-child pairing on the results. All nine had at least one opposite-race contact in their functional network, and eight of nine had at least one in their Primary network.

CCA - Total Score

The intent of the Child-Caregiver Activities Interview Identity questions was to elicit a large pool of commonplace child-related experiences which could eventually be subjected to content analysis for the presence of Black and white cultural material. When we looked at the frequency of examples for each question, there were no significant differences by race, and most subjects gave multiple examples to each question. For example, to the question on "telling stories or reading books to your child," an average of nearly four different examples were given, and the number of "different topics of conversation with your child" averaged 2.43. When we summed across all of the questions, the total scores for Blacks and non-ethnic-whites were statistically the same; however, the ethnic-white group had on average a larger total score (p=.03) than the other mothers. Given that the social networks of this group were also larger, perhaps it is not surprising that more activities are carried out with their children.

* This is probably also characteristic of America in general. Many of our white two-parent homes were in all white neighborhoods, while middle-income Blacks tended to live in racially mixed neighborhoods.

Black-to-White Cultural Content Score

To what extent are the mothers presenting the world as a mono-racial or multi-racial experience? To explore this question it was necessary to take a respondent's total score and calculate the proportion coded Black-oriented. The remaining proportion defined the extent to which the information was coded "white" or "general American." Our guiding hypothesis led us to believe we would find bi-racial information being presented in Black homes and mono-racial (white) information in white homes. The results of an analysis of variance on the proportion of Black material score seem to confirm the predictions. In column one of Table 6.6, under the heading "Black Content," the mean Black information proportion values are presented, first for the three groups of mothers and then for the race-of-mother by family-structure interaction. The Black information value for the Black mothers was significantly higher ($p=.01$) than for either of the two white groups. On average, 19% of the protocols produced by Black mothers contained some information about Black people, and 81% seemed to stress information about the society in general. In white homes, about 4% of the responses were found to have Black content or information, and 96% did not.

Proportion of Black and White Dolls/Human Figures

When recording the number of doll/human figures found in the home, the interviewers had three categories or codes to work with: Black, white, and "other." The first two are self-explanatory while the third is not; it refers to such human figures as the "Green Hulk," which, of course, is neither Black nor white. Asian, Mexican, or Native American dolls were also coded as "other," although few were found in the homes. The inclusion of the "other" category meant that during analysis, the proportion of Black and white dolls taken together would not necessarily total one (1.00), a point the reader will want to keep in mind. Table 6 contains two sets of mean proportion scores for the Black, white, and ethnic-white mothers that resulted from the application of analysis of variance. As might seem self-evident, the two white groups had higher white-doll proportion scores than did the homes of Black children, and the Black-doll proportion score for Black homes was significantly higher than the values associated with the two white groups. More important were the resulting patterns: 1) in Black homes, one was likely to find a white doll or human figure for every Black doll/figure recorded; 2) most of the doll/figures in white homes were white, with few instances of Black figures or dolls.

Black Culture Score

When at least one of the protocols for a question was coded Black-oriented, a score of one was recorded for that question; zero was recorded when none of the items contained Black-oriented information. Since there were twenty questions, a range of 0-22 was possible for the "Black culture" score. Our focus here is on the Black group only, since the white scores were very low, as expected. If by accident we had selected a Black sample that were very nationalistic,the Black culture score should be high, and this would be important in interpreting the Black trends. It appeared that this was not the case, for the average score for Black homes was only 5.29; and there were no families that scored high (above 10) on the scale. While we cannot say whether the cluster of Black households in our sample is typical of most Black American homes, we would suggest that this study was highlighting a Black sample that was not placing a great deal of emphasis on Blackness in presenting information about the world to their children.

Discussion

In this study we have been attempting to come to grips with the ecology of human development, especially the racial implications for the young child's emerging world view, in terms of an analysis of the racial composition of the mother's social network (i.e., the people most likely, along with the mother, to be influencing how the world is being depicted), and the racial/cultural messages embedded in the child's commonplace experiences.

The Mother's Social Network

The target children in this study were between the ages of 2½ and 3½ years, and most were closely tied to the mother's world; consequently, we assumed that by examining the mother's social network one could gain some insight about the people who are most likely presenting information about the world to the target child. Our analysis revealed networks even more racially homogeneous than had originally been expected. On average, white mothers seldom listed an opposite race contact for their Functional or Primary network and this would appear to diminish the probability that white children encounter Black people as informants when we shifted to the frequency of at least one opposite race contact in a social network. This was more likely to be a characteristic of Black than white networks. Two-parent (middle-income) Black homes were more likely to have at least one white contact than one-parent (low-income) Black homes. This apparent SES trend was missing in the white data, where there was a tendency for middle-income white mothers to have fewer, not more, opposite-race contacts than was the case for white single-parent mothers of low SES. Because the frequency of mixed-race circumstances (mother white and child black) was small (n = 9), the trends must be viewed with caution; however, the frequency of opposite-race contacts was rather dramatic in such instances. The offspring of mixed-race associations are probably encountering opposite-race contacts, beyond their immediate family, on a regular basis. With this one exception, however, our data showed that on average, the social network of Black or white mothers afforded a set of mono-racial experiences for their children. There was a modest tendency toward bi-racial encounters in the typical Black home that seems to become stronger with increasing SES, but this finding should not blur our perception of the overwhelming mono-racial nature of the networks of Black mothers.

Racial Implications of Commonplace Activities with Children

The content analysis of commonplace child-related activities suggested that white mothers do not appear to be cueing their children toward a bi-racial world view. This does not mean that they were being explicitly white-oriented or even racist, for the process revealed was one of omission rather than commission. The white mothers simply gave no indication that some of the child's everyday activities could be used as a vehicle to increase his or her awareness that the world consists of people who are racially different in appearance, behavior, and culture.

On average, 21% of the activities described by the Black mothers had an explicitly Black culture base, while 79% reflected a general American frame. The doll count produced a much higher Black ratio, with typically about 40% of the dolls found in Black homes Black, and 60% white. This suggests that the Black child's ecology presses them to develop bi-cultural competence, with cultural emphasis being dependent upon the specific nature of each activity. Religious events and musical information had a decidedly Black orienta-

tion; the doll count showed the mothers depicted the world as consisting of Black and white people, while the overall emphasis of Black mothers seems to stress information about the white world. This last point could be misleading. While it is true that, generally speaking, the mothers seem to stress white cultural information (79%) over Black information (21%), it must be remembered that both types of information were being communicated by Black people. Recall that the social networks of both the single- and two-parent Black households were about 90% to 95% Black. It is unlikely that the Blacks in these networks would pass on information about the white world to the children without first filtering racist content. Consequently, the Black three-year-olds in our study were probably being informed about the Black and white worlds from a Black perspective.

This is not to suggest that a Black nationalistic frame was the filter being applied. Few children had African names, most of the oral stories or written books, with the exception of magazines, were white-oriented, and few mothers stressed activities that would promote a very conscious sense of Blackness in their children. There were twenty-two different points during the interview when a parent could have stressed Black-oriented activities, contents, or concerns, but the average score for our subjects was between 4.5 and 6.00. Of course, since most of the child's informants about the world were Black, perhaps the mothers were not overly concerned about the communication of Black information, this being seen as something that would happen "naturally."

Implications

If we were to use the information generated by this study to predict racial preference patterns in Black and white children, it would be reasonable to assume that the two groups of children would "play back" reality in a manner similar to the way reality has been presented to them. A categorical same-race preference would be predicted for whites as a group, and a "split" or dualistic pattern for Blacks as a group. Such patterns would probably have little to say about the level of "self-esteem" characteristic of either group, but a great deal to say about the ontogeny of a white-oriented mono-racial reference group orientation in whites, and a bi-racial reference group orientation or bi-cultural competence in Blacks. More than likely, this has always been the case, and in attempting to link racial preference to mental health rather than world view, we have been doing a grave injustice to these children, especially to Black children and their families.

Table 6.1

DEMOGRAPHICS FOR BLACK, ETHNIC WHITE,
AND WHITE NON-ETHNIC MOTHERS

Ethnicity by Family Structure	N	Family Income ($)	Per Capita Income ($)	Mother's Education (years)	Mother's Age (years)	# of Children
Black - 1-parent	40	6,628	1,760	11.3	26.7	3.0
Black - 2-parent	27	19,220	4,358	12.6	29.9	3.0
Ethnic - 1-parent	13	5,991	2,008	12.7	28.0	1.8
Ethnic - 2-parent	27	19,171	4,432	11.8	30.8	2.7
White - 1-parent	20	7,743	2,152	11.8	29.2	2.8
White - 2-parent	30	15,710	3,451	12.2	30.5	2.7

Table 6.2

SIZE OF TOTAL, FUNCTIONAL, AND PRIMARY NETWORK FOR
BLACK, WHITE, AND ETHNIC WHITE MOTHERS EXPRESSED AS MEAN VALUES

Race of Mother	N	Total Network	Functional Network	Primary Network
Black	64	16.2	10.8	4.8
White	50	18.9	15.2	5.5
Ethnic-White	40	22.6*	18.8**	6.5

* P = .04

** P = .004

Table 6.3

NUMBER OF KIN (RELATIVES) IN THE TOTAL, FUNCTIONAL, AND PRIMARY NETWORK FOR BLACK, WHITE, AND ETHNIC WHITE MOTHERS EXPRESSED AS MEAN VALUES

Race of Mother	N	# of kin in Total Network	# of kin in Functional Network	# of kin Primary Network
Black	64	13.0	8.4	3.9
White	50	13.3	10.5	4.1
Ethnic-White	40	16.2	12.0*	5.3

* P = .06

Table 6.4

PROPORTION OF SAME-RACE AND OPPOSITE-RACE CONTACTS IN THE FUNCTIONAL AND PRIMARY NETWORKS FOR MOTHERS IN BLACK, WHITE, & MIXED-RACE SINGLE- AND TWO-PARENT HOUSEHOLDS: 2X3X2 DESIGN (Network Level x Race x Family Structure)

Mother-Child Pairing for Race:	Family Structure	Functional		Primary	
		%Black	%White	%Black	%White
Mother & Child	1P	96%	4%	96%	4%
Black (N = 67)	2P	93.5%	6.5%	99.5%	.5%
Mother &Child	1P	1%	99%	1%	99%
White (N = 200)	2P	.4%	99.6%	.2%	99.8%
Mother-White &	1P	37%	63%	66%	37%
Child-Black (N = 9)	2P	42%	58%	40%	60%

Table 6.5

PROPORTION OF MOTHERS WITH AT LEAST ONE FUNCTIONAL OR PRIMARY NETWORK OPPOSITE-RACE CONTACT FOR BLACK, WHITE, & MIXED-RACE HOUSEHOLDS X SINGLE- & TWO-PARENT HOUSEHOLDS: 2X3X2 DESIGN (Network Level x Race x Family Structure)

Mother-Child Pairing for Race:	Household Structure:	Functional Network Frequencies NONE	1+	Proportions NONE	1+	Primary Network Frequencies NONE	1+	Proportions NONE	1+
Mother & Child Black	1P	30	8	79%	21%	35	3	92%	8%
	2P	17	12	59%	41%	26	3	90%	10%
Mother & Child White	1P	26	5	84%	16%	29	2	94%	6%
	2P	151	18	89%	11%	160	9	95%	5%
Mother White & Child Black	1P	0	2	--	100%	0	2	--	100%
	2P	0	7	--	100%	1	6	14%	86%

Table 6.6

PROPORTION OF BLACK CONTENT, BLACK DOLLS, AND WHITE DOLLS FOR SINGLE- AND TWO-PARENT BLACK, WHITE, AND ETHNIC-WHITE HOUSEHOLDS EXPRESSED AS MEAN PROPORTION VALUES

Ethnicity	Black Content	White Content	Black Dolls	White Dolls
Black	.19**	.81	.41**	.38
White	.04	.96*	.02	.60*
Ethnic-White	.03	.97*	.00	.76*
Ethnicity by Family Structure				
Black 1P	.17	.83	.39	.37
Black 2P	.21	.79	.42	.38
White 1P	.03	.97	.01	.56
White 2P	.04	.96	.04	.66
Ethnic-White 1P	.03	.97	.00	.76
Ethnic-White 2P	.04	.96	.00	.75

*P $\leq$ .05

**P $\leq$ .01

CHAPTER 7

IMPLICATIONS FOR PROGRAM EVALUATION

Moncrieff Cochran

The reader of this report has, by now, been introduced to the families in our study from a variety of perspectives. It is important not to lose sight of the fact that all these analytic initiatives have been in the name of the intervention program. Evaluation of our parental empowerment effort is the principal purpose for which the National Institute of Education supported the Family Matters Project, and so it is appropriate that we use the intervention program as the context within which to summarize our findings.

In order to properly understand how mothers' perceptions of the worlds both inside and outside their families might affect and be affected by the intervention effort, one must have a clear understanding of the developmental framework underlying the program itself. This framework, and the beliefs out of which it has evolved, are detailed elsewhere (Cochran and Woolever, 1980; Cochran, 1981). By way of summary, it can be said that the framework emphasizes adult development as the vehicle for the development of the child. Central to this aspect of adult development is the perception by the parent that she or he is important and worthwhile. For that reason, we have worked hard in home visits and neighborhood cluster groupings to enhance parents' perceptions of themselves as parents and of their capacity to deal effectively with the external environment. There has also been an emphasis on activities which would increase parents' perceptions of the child as interesting, cooperative, and capable. If these perceptions of self as parent and of child are a primary target of the intervention, then of course it is essential that we understand in detail what perceptions our parents brought with them to the program experience, in order that we might be able to anticipate the impacts that participation might have had on different segments of the participant sample.

The purpose of enhancing parents' perceptions of themselves and of their children has been to increase the involvement of those parents in the activities of their children and, in so doing, to enhance each child's ability to engage successfully in activities both inside and outside the home. For that reason, we have devoted a portion of data collection and analysis to understanding the relationships between parents' perceptions of their children and the activities they report themselves as engaged in with them. We are realistic enough to believe, however, that sheer enthusiasm for parenting and desire to manage the outside world on behalf of the child is not enough, that the world beyond the family must make some accommodation to the childrearing process if parents are to succeed with their children. For that reason many of our analyses have focused on those external contexts: the neighborhood, the world of work, the social network of relatives and friends. In a modest way the intervention program also addressed those external contexts, in particular some aspects of the neighborhood and neighboring networks.

In the discussion which follows, the external contexts affecting program implementation and impact are treated first, beginning with the program neighborhoods and then proceeding to paid work and social networks. These are followed by consideration of perceptions focused inside the family--the mother's view of herself as a parent and of her child--as they might affect implementation of the Family Matters program. The chapter concludes with a profile of the struggle engaged in by single mothers as they raise their children in an indifferent and sometimes hostile world.

The parental empowerment program developed by Family Matters has employed two basic strategies for involving families in parent and child-related activities: home

visiting and neighborhood cluster-building. These two approaches will serve as reference points for the discussion of program implications.

The Neighborhoods

The central theme arising from Heather Weiss's analysis of the ten program neighborhoods derives from her use of Suttles's defended-neighborhood concept: that the physical, social, and ecological characteristics of the low-resource neighborhoods (LBJ, Tallman-South, Lexington-East Fayette) combine to significantly restrict the geographic and social range of the families living within them. The parks and other public areas are geographically available, but functionally inaccessible; broken glass and heavy use by unfriendly teenagers eliminate those areas as contexts for parent-child activities, and force families to remain in small, rented apartments which rarely include any safe outdoor play space. These neighborhoods are perceived by project parents as unsafe to walk through, especially at night, and those perceptions are backed by crime statistics. Length of residence in the low-resource neighborhoods tends to be short, and other neighborhood residents are perceived by our parents as unlike themselves. Enough residents in these neighborhoods are involved with public agencies of one sort or another so that participation in the Family Matters program may have attached to it the stigma associated with deficit-oriented "public assistance."

It is not difficult to anticipate the consequences of life in one of these low-resource neighborhoods for program implementation and impact. Home visitors will be greeted with great caution, and trust-building will be a long, slow process. Once trust is established, and parents become convinced that the worker believes in them, whatever desire there may be to increase joint activity with the child will be seriously restricted by close quarters in the home and no safe parks within walking distance. Cluster-building with neighbors will not be possible before trust with the Family Matters worker is well established, as there will be much suspicion to be overcome. Once neighborhood contacts have been established, maintenance of them will be made difficult, especially for single mothers, by the dangers associated with walking in the neighborhood or meeting in the park. Generally speaking, then, what we have learned about the low-resource neighborhoods can be used to argue persuasively that these neighborhoods will be distinguished from the seven others by the difficulty program workers will have in establishing trust with parents and in being able to provide useful information and support to them over a sustained period. Of the two strategies available to program workers, one would expect the home-visiting approach to be the more successful under conditions as conducive to defensive withdrawal as those described by these parents.

The shift from low to moderate income brings with it some real benefits at the neighborhood level, if one can generalize from our sample. In Eastwood North and Nedrow, unlike in the three low-income neighborhoods, there is substantial agreement that space is available for activities with the children and that neighbors are generally friendly and even helpful. Fears associated with crime and broken glass are gone. It is clear that those poverty-related forces, which must have a dampening impact on any intervention effort, are not present. What seems to emerge in the neighborhoods whose residents are unshackled from the confines of poverty is diversity, not necessarily within the neighborhoods but among them. While Eastwood North and Nedrow both have families who are living somewhat above subsistence levels, they are different in many other ways. Eastwood North, located closer to the city center, consists primarily of small houses built very close together, rented or owned by strongly ethnic families. Nedrow is a suburban village,

isolated from city services, where families without strong ethnic ties live in their own homes (90% owner-occupied). There is good reason to believe that these differences would affect the way a parental empowerment program is received in the two neighborhoods. One would expect Eastwood parents to move cautiously, needing to understand that Family Matters is not a "welfare" program and wanting some approval from relatives and friends before becoming too involved. Home visiting would appear to be a comfortable alternative, with ethnic ties possibly making the clustering option somewhat superfluous. In Nedrow, however, the absence of closely knit ethnic ties and a paucity of urban social activities and services might combine to stimulate interest and receptivity toward paraprofessionals interested in young children and their parents. Positive comments made by the parents in that neighborhood about their neighbors suggest that a program which brought families together in clusters might be welcomed.

The other five program neighborhoods in the sample have in common middle-income families, and the stability that those economic resources can ensure. Families seem to share an enthusiasm for their living areas and an appreciation for the way neighbors support each other and keep an eye on the children. Again, however, this secure economic foundation has spawned real diversity. Liverpool, the "New England" suburb, differs markedly from the Irish and Polish Tipperary Hill or the predominantly Italian Schiller-Wadsworth, two city residential neighborhoods. Westcott-Thordon and Salt Springs, also city residential areas, are racially integrated and very heterogeneous in social character and lifestyle, making them quite different from either their ethnic or their suburban counterparts. Again, one would expect these differences to be reflected in how the Family Matters program is received, and the way that it affects families in the five neighborhoods. Liverpool residents, who are reasonably well off financially and live in a self-contained community with its own distinctive character, might be tolerant of programmatic efforts without really coming to grips with its assumptions and goals. In the strongly ethnic neighborhoods, one would expect a certain wariness about the inherently intrusive nature of the program, but a multiplier effect in those cases where acceptance was gained. Home-visiting might be seen as welcome contact with views from beyond the ethnic island, and clustering as either unnecessary or a natural extension of networking already underway. In Schiller-Wadsworth, the strongly patriarchal family arrangements and continued use of another language (Italian) might combine to inhibit mothers from participating actively. Certainly neighborhood clustering attempts that crossed social boundaries already established in the neighborhood would meet with considerable resistance. The racial and economic diversity characterizing Westcott-Thorndon and Salt Springs might well lend itself to the home-visiting approach but mitigate against neighborhood clusters, unless pressing neighborhood-wide issues could be found to serve as a unifying force.

One would have to conclude from our analysis of program neighborhoods that the only melting-pot brewing in Syracuse is poverty. The absence of resources serves to bring a certain sameness of character to our low-income neighborhoods. Once the safety net provided by moderate income is available, however, it is the differences among neighborhoods, rather than their similarities, which come to the fore.

Work Outside the Home

Mothers working outside the home carefully select jobs whose timing accommodates the needs of the family as they perceive them. This is the major finding documented by Heather Weiss in a chapter on work in an earlier report to NIE (Cochran et al., 1981). For

a number of married couples, the task of fitting employment together with parenthood is viewed as including child care provided by the parents themselves. The kinds of employment which make it possible for both parents to hold jobs, and yet one be at home throughout the day (shift work, weekend work), leave them very little time together as a couple or as a total family. What might these complicated schedules mean for an intervention program designed to encourage and reinforce parent-child activities and the sharing of parenting responsibility between husband and wife?

Three perspectives seem relevant, two of which would compete with program effectiveness and a third which might point the way to information valued by parents. The starting point must be with what Heather Weiss refers to as the principal cost associated with the work schedules of couples in which both parents are working, especially if they work full-time: the pressure associated with a lack of time. If the Family Matters program is perceived as requiring time which is already in very short supply, then those families will need to be convinced that the program can provide them with something very useful before they will be willing to part with such a precious commodity. To the extent that the program requires, or even implies the importance of, both parents together, it is likely to antagonize those for whom work schedules make such an arrangement impossible. Such an expectation would be more apt to emanate from the cluster-grouping than the home-visiting approach. Home-visiting is also more easily adapted to scheduling problems than is clustering, because it does not need to accommodate the schedules of four or five families simultaneously.

A second potentially negative consequence of the Family Matters program for working parents is psychological: the possible guilt created in those parents who feel that the program expects them to spend time with their children which is not permitted by the current work arrangement. The danger is reduced for the couples in our sample by the special effort many of them have made to select work arrangements which permit one of them to be with the child at all times. In the case of single mothers, however, the danger is especially great. Again, the capacity of program operations to accommodate the schedules of working parents is crucial. One way to be facilitating in that regard has been through provision of child care arrangements at cluster meetings, so those meetings can accept parents and children together rather than becoming another time when the parents must leave the child in order to participate.

It is apparent from our analyses that designing a daily routine which makes possible both satisfying parenting and employment outside the home for both parents requires great skill and perseverance. Two kinds of support might be useful to such parents: emotional support from the understanding of others, and good ideas about how to make the best possible use of available resources. Family Matters could be useful to parents, married or single, who are working long hours outside the home, by providing these kinds of support, through either home visits or neighborhood clusters.

Personal Social Networks

The most dominant finding in Chapter 5 was that the network world of single mothers is sharply different from that of married women. For that reason, the networks of single and married mothers will be discussed separately in relation to the intervention program. This distinction is made in anticipation of the final section in this last chapter, which integrates various threads from the rest of the report on behalf of understanding how single mothers will respond to Family Matters' offerings.

Married Mothers

A quick review of findings* related to the personal social networks of married mothers yields the following facts: 1) less educational attainment is associated with smaller networks; 2) a strong ethnic background seems to compensate for low income, increasing the size of networks in poor families; 3) kin-folk predominate in the networks of married mothers, although this situation is attenuated by increase in family income; 4) work outside the home increases the size of mothers' networks at every income level; 5) as the number of neighbors and workmates in mothers' networks increases, so does frequency of contact with them, and 6) for married mothers, larger networks and greater access to instrumental and emotional support from relatives, neighbors, and friends are associated with more positive views of self as a parent and of the child, and the reporting of greater amounts of joint mother-child activity. Several aspects of these findings are pertinent to an understanding of how the Family Matters program might be received by married mothers. First, it is clear that several features of the "natural" society contribute to increases in network size, especially if one is poor: embeddedness in a strongly ethnic family and working outside the home. To the extent that participation in the intervention program, and especially in the clustering portion of it, could be expected to expand parents' social reference groups, these natural social forces might compete with the attraction of that aspect of Family Matters. The hypothesis is, then, that the networks of married mothers from strong ethnic backgrounds and those working outside the home will be less affected by program participation than will those of non-ethnic housewives. Second, it appears that the "luxury" of maintaining a greater proportion of single-stranded non-kin in the network comes with increase in family income. Therefore it seems reasonable to predict that the "network-building" potential in program participation will be the greatest for non-ethnic middle income mothers who are not employed outside the home.

There is much more to Family Matters than cluster-building, with its attendent potential for affecting personal networks. The home visitor may be particularly attractive to mothers whose capacity to sustain network relationships is already heavily taxed. Such a person can provide many of the assets without the liabilities of a multistranded network member, and can be flexible enough to accommodate the demands of tight schedules or the particular expectations of different ethnic groups.

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* Some of these findings were reported in Cochran et al.'s (1981) report to NIE but are not included in this report.

Single Mothers

Like most single mothers nationwide, those in our sample tend to be living in or close to poverty. The demands associated with running a household and raising one or more children alone are great. It is not surprising, therefore, to find that these mothers have larger networks than do married mothers at the same income level. The networks of single mothers are also more multistranded in their exchange patterns than those of their married counterparts, and include a much higher proportion of non-kin. There is some indication that their view of themselves is more affected by "difficult" contacts in their networks than is the case with married mothers, perhaps because their reliance upon network support is more pronounced.

Other things being equal, one would expect the Family Matters program to be especially appealing to single parents. The program provides a sympathetic non-relative as home visitor, who makes few demands and can provide a variety of kinds of information about children, parenting, and community resources. Cluster groupings are available as a means of meeting non-relatives in the neighborhood, a need heightened by the fact that single mothers are often living in neighborhoods where they are relatively new residents. In fact, other things are not equal. As we point out at the end of this chapter, a number of constraints combine to discourage single mothers from neighboring. At the same time, the demands they face are a strong incentive to become involved with the program in one way or another. For that reason we expect to find that single mothers have been the most active users of program resources over time, and that their children have received the most benefit from program participation.

Mothers and Children: Perceptions and Activities

As pointed out at the beginning of this chapter, intervention by Family Matters workers is aimed primarily at enhancing parents' perceptions of themselves and their children, on the assumption that changes in these attitudes will lead in turn to more activities with and on behalf of their children. With this central purpose in mind, it becomes obvious that prediction of program impact depends on a clear understanding of parental perceptions prior to introduction of the program. The analyses and interpretations in Chapter 3, and others in the larger report (Cochran et al., 1981), are illuminating in that regard. This exhaustive series of analyses has led the authors to the conclusion that parent-child interaction is most likely to produce desired results when it occurs in a context that accords status and value to the roles of both participants. The findings leading to this conclusion involve the positive value placed on boys in ethnic families, and on girls in non-ethnic ones, and the way those positive perceptions by mothers are enhanced by positive work experiences outside the home, especially if the subculture supports mothers in the wage-earning role.

Just how the program will affect perceptions so conditioned by ethnicity and work status is difficult to predict. Certainly program workers have been unusually sensitive to ethnic and cultural variations. This has not, however, included bias in favor of children of one sex or another, depending on ethnic background. Perhaps, then, the effect of support for the parenting role will be to reduce ethnic and working status differences by providing a lift for mothers in these niches where less status and value have previously been available to them.

The finding that parent-child activity leads to positive perceptions of the child only after that activity reaches a critical level of intensity has important ramifications for program evaluation. We have had no good way to tell whether there is a relationship between intensity of participation by the parent in program activities and the intensity of activities with the target child. Should such a relationship exist, and assuming that a higher level of parent-child activity and positive perceptions of the child lead to greater success by the child in school, then it becomes important to distinguish high- from lower-intensity participation in the program as we compare program with non-program families and examine changes occurring between baseline and follow-up. The data needed to distinguish families heavily involved in Family Matters from those involved less intensively have been carefully compiled, and are currently being prepared for analysis.

Single Mothers

A fundamental question for the ecology of human development is how much the developing individual can control the environment within which that development is taking place. Is development simply channeled by external forces beyond the control of the individual? Or do the needs perceived by the developing person act as motivating forces which lead to active manipulation of the environment? The data in this report suggest that the answer to both those questions is "yes." Yes, socioeconomic forces channel low income families into a limited number of low-resource, low-status neighborhoods, where they maintain personal networks of limited size and scope and raise their children in an environment benign at best, and often hostile. And yes, within the constraints imposed by low income and a lack of educational opportunity, there are signs that parents respond to their own needs as they perceive them by actively molding the environment to relieve stress. Heather Weiss has described the lengths to which parents in two-parent families will stretch in order to maintain two wage-earners in the family while at the same time caring for their children themselves in their own homes. A still more dramatic example, however, is provided by the single mothers in our sample. While analyses of the data provided us by white, single mothers have not progressed quite as far as those using data from married mothers, what material we have examined suggests that mothers raising their children alone are engaged in a continuing struggle to alter the ecologies surrounding them in ways that meet their particular needs. Although forced by the lack of resources to live often in substandard housing, usually in neighborhoods characterized by deteriorating facilities and high crime rates, these women maintain larger social networks than their low-income, married counterparts, and are more likely than married mothers to engage in network relationships which are multi-functional in content. Cut off from the kin network somewhat by the absence of the father and, perhaps, by the stigma associated with single motherhood, they compensate by maintaining regular and sustained contact and exchange with a relatively large set of unrelated neighbors, workmates, and other friends. Although usually so poor that they cannot afford the capital investment needed to buy their way into middle-resource neighborhoods, a number of the single mothers in our sample have established their families in subsidized niches within the neighborhoods of home-owning families, and have busily tied themselves into informal support networks already in operation in those apartment complexes. This constant struggle to maintain a family and raise a healthy child in uncaring and even hostile economic and social circumstances is remarkable for its courage and tenacity. The Family Matters program was designed to make this struggle a little bit easier for all participating families. Single mothers should have found our services particularly useful. Whether they in fact did is a story which only they can tell. We eagerly await their verdict.

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